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aeromet

MONTHLY PROGRESS REPORT NO. 18
for the period August 1-31, 1977
to
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

1860 Lincoln St., Suite 900
Denver, CO 80203

Contract No. 68-01-1946

Utah U-a/U-b Tract

aeromet inc.

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by

AEROMET, INC.
P.O. Box 45447
Tulsa, OK 74145

Utah U-a/U-b Tract

1.0 INTRODUCTION

Low level temperature and wind data were collected for August, 1977 at the U-a/U-b Tract 5 miles south of Bonanza, Utah. The data were collected using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were scheduled for $\frac{1}{2}$ hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 500 ft/min and it was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 24 ft AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built-in Rustrak strip chart recorder and the temperature was recorded within the range from -50°C to +50°C. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary Section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No. 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows . . . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows . . . 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.

2.0 DATA SUMMARY

2.1 Utah U-a/U-b Tract Field Summary

No problems were experienced at the site for the month of August. The observer attempted 94% of the scheduled pilot balloon launches which resulted in 91% recovery of the temperature data and 85% recovery of the wind data. A 3% loss in temperature data resulted from a malfunctioning T-Sonde while the additional 6% loss resulted from poor weather conditions. The 15% loss in wind data also resulted from poor weather conditions at the site.

The White River Shale project will not be able to continue supplying time and money for their personnel to act as observers for Aeromet during the four month extension from October to January 1978. Aeromet is investigating the possibility of relocating the site in Bonanza where several persons expressed interest in being observers before the current arrangements were made with the White River Shale project.

2.2 Mixing Layer Height

The average mixing layer height was computed for the morning and afternoon based on the morning and 1400L temperature soundings. The balloon release $\frac{1}{2}$ hour after sunrise is near enough to the minimum temperature to assume the correctness of the calculated mixing layer heights. The afternoon balloon release is generally not at the time of maximum heating and the user of the mixing layer height data must be aware that minor changes in the calculated values can be expected. Without equipping the field sites with minimum/maximum thermometers the extrapolation of the afternoon data can not be justified in establishing a data base for statistical analysis. The approximation of the afternoon maximum temperature would be a "calculated guess" for there are: 1) local effects which are to be determined and would be filtered out with extrapolation, 2) mountain effects which alter the lower 1500m (e.g. downslope effects), and 3) meteorological effects which can alter the expected change in the sounding (e.g. advection, moisture, etc.).

It is felt that to better define the mixing layer height that a variety of "heat island" effects should be viewed. The rigorous method would be to define 15 "heat island" effects ranging from 0 to 14°C and let the user decide which would best serve his needs. However, for these analyses 0°, +5° and +10° "heat island" effects are calculated and listed for the morning and afternoon soundings in the table Average Mixing Layer Height.

The symbol N/D means that no mixing layer height was defined and sfc is the abbreviation for surface.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.

3.0 DATA PROCESSING

3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthogonal components of the wind. The wind profile is also punched on computer cards at 30 second intervals.

The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and punched on cards. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce for this site a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G.C., 1974: "Climatological Data on Atmospheric Stability in the United States" Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce for this site a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the $\Delta T/100m$ criterion is met but the wind speed criterion is not met, then the

STABILITY CLASS	ΔT ($^{\circ}\text{C}/100\text{m}$)	WIND SPEED
A	<-1.9	<2
B	-1.9 - -1.7	<5
C	-1.7 - -1.5	<6
D	-1.5 - -0.5	ALL SPEEDS
E	-0.5 - 1.5	<5
F	>1.5	<3

wind data are checked against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example,

if the $\Delta T/100m$ value is 1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of $1.7^{\circ}\text{C}/100 \text{ m}$ and a wind speed value of 7 m/s are classified under stability class D, not class F.

The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.

3.2 Punched Output

The punched temperature and wind data for each observation are categorized into four groups, each separated by a blank card. The first group begins with a header card listing the station name (3A4), the station elevation in meters (I4), the month, date and year (I6), the observation time (I4), the time zone (A3), the balloon ascent rate in feet per minute (I3), the sampling interval in seconds (I2), the temperature error in °C (F5.1), the T-Sonde I.D. number (I5) and the surface wind speed in kts and direction (2F6.1). A surface wind speed of 180.0 KTS indicates missing surface wind data. The series of cards prior to the first blank card include on each card the elapse time in minutes (2X,F5.1), the height of the balloon in meters AGL (4X,F5.0), the height of the balloon in meters MSL(4X,F5.0), the temperature in °C (4X,F6.2), the change in temperature between standard or significant levels (2X,F6.2), the lapse rate per 300m (2X,F6.2), the difference in the lapse rate per 300m and the dry adiabatic lapse rate per 300m (2X,F6.2), the wind speed in m/s if known (4X,F5.1), and the wind direction if known (3X,F5.0). The cards following the first blank card include on each card the elapse time in minutes (2X,F5.1), the height in meters AGL (4X,F5.0), the height in meters MSL (4X,F5.0), the u-component of the wind in m/s (4X,F6.1), the v-component of the wind in m/s (6X,F6.1), the wind speed in m/s (7X,F5.1), the wind direction (6X,F5.0), the elevation angle in degrees (F5.1) and the azimuth angle in degrees (F5.1). The cards after the second blank card include a header card like before and a series of cards with four groups of the following on each card; the height in meters AGL (F6.1), the temperature in °C (F6.2), the lapse rate °C/300m (F6.2) and a blank space (1X). The cards after the third blank card include a header card the same as described earlier, eight cards with the original digitized temperature data and a flag to indicate interpolated data (20(F3.1,I1)), five cards with the elevation angle in degrees (16F5.1), and five cards with the azimuth angle in degrees (16F5.1). The temperature data are in degrees Celsius and have 50°C added to each value. An elevation angle of 180° indicates a missing azimuth and elevation angle value.

The punched output from the bivariate frequency distribution calculations include a header card as illustrated below,

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年月日：1976.

CARTER

SFC TO 500 METERS

and the punched distribution data for each wind direction under each stability class in agreement with the "star" output. The stability classes are number coded as follows:

STABILITY CLASS	NUMBER CODE
A	1
B	2
C	3
D	4
E	5
F	6
Independent of Stability	7

The station I.D. numbers are as follows:

STATION	I.D. NUMBER
Casper, Wyoming	1
Colorado C-b Tract	2
Craig, Colorado	3
Escalante, Utah	4
Hanksville, Utah	5
Rock Springs, Wyoming	6
Utah U-a/U-b Tract	7

The month and season number codes are as follows:

MONTH	1-12
SEASON	13 = DJF
	14 = MAM
	15 = JJA
	16 = SON
ANNUAL	17

PILOT BALLOON SUMMARY
Utah U-a/U-b Tract
August, 1977

August 1	0516	Temperature values were interpolated over the interval from 16 to 18 1/4 minutes.
	1350	
August 3	0512	
	1350	
August 5	0519	No wind observations taken due to rain.
	1250	
August 7	0520	
	1350	
August 9	0521	
	1350	
August 11	0522	Temperature values were interpolated over the interval from 18 1/2 to 20 1/2 minutes.
	1350	
August 13	0526	Temperature values were interpolated over the interval from 7 to 12 1/4 minutes.
	1354	Temperature values were interpolated over the interval from 7 3/4 to 12 3/4 minutes.
August 15	0526	No observations taken due to thunderstorms in vicinity.
	AFTN	
August 17	0529	No observations taken due to thunderstorms in vicinity.
	AFTN	

PILOT BALLOON SUMMARY
Utah U-a/U-b Tract
August, 1977

August 19	0532	
	1352	
August 21	0533	
	1350	
August 23	0535	The temperature sonde failed 15 seconds after launch.
	1350	
August 25	0536	Balloon burst after 9 1/2 minutes. No wind observations taken due to rain.
	1342	
August 27	0538	No wind observations taken due to rain.
	1350	
August 29	0540	
	1350	
August 31	0542	
	1350	

AVERAGE MIXING LAYER HEIGHT

Utah U-a/U-b Tract

August, 1977

HEIGHT IN METERS

DATE	MORNING			AFTERNOON		
	0°	+5°	+10°	0°	+5°	+10°
1	sfc	100m	400m	1100m	2400m	3150m
3	sfc	200m	450m	1050m	3100m	4250m
5	100m	800m	2200m	1000m	2400m	4300m
7	sfc	200m	550m	150m	1500m	3700m
9	sfc	150m	500m	1050m	1850m	3350m
11	sfc	300m	900m	550m	900m	1550m
13	sfc	200m	800m	2600m	3750m	3950m
15	sfc	150m	950m			
17	sfc	400m	1400m			
19	sfc	400m	1050m	950m	1550m	2100m
21	sfc	250m	900m	600m	2400m	3850m
23	sfc	200m	1000m			
25	50m	750m		750m	1450m	2750m
27	200m	1400m	3500m	200m	1000m	2200m
29	sfc	200m	1000m	700m	1600m	3050m
31	sfc	400m	1000m	350m	1500m	2600m

CLOUD COVER AND SIGNIFICANT WEATHER
Utah U-a/U-b Tract
August, 1977

<u>DATE</u>	<u>MORNING</u>	<u>AFTERNOON</u>
1	clear	clear
3	scattered	broken
5	overcast; rain	scattered
7	scattered	scattered
9	scattered	scattered
11	broken; TRW north	broken
13	scattered	scattered
15	scattered	TRW
17	overcast	TRW
19	scattered	broken
21	scattered	scattered
23	scattered	scattered
25	overcast; rain	scattered
27	overcast; rain	broken
29	scattered	scattered
31	scattered	scattered

***** UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5115

DATE 08/01/77 TIME 05 16MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	571.	0.95	0.0

***** UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5106

DATE 08/01/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-1.94
100.	250.	-0.83
250.	500.	-0.97
500.	750.	-1.00
750.	1000.	-0.92
1000.	1500.	-0.41

***** UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5104

DATE 08/03/77 TIME 05 12MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	610.	0.89	0.0

***** UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5108

DATE 08/03/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
989.	1217.	0.0	-1.04

***** UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5107

DATE 08/05/77 TIME 05 19MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
724.	876.	0.52	-0.55

UTAH UAUB ELEV 1585 METERS SOUNDED ID 5103

DATE 08/05/77 TIME 12 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
1012.	1164.	0.59	-1.05

***** UTAH UAUB ELEV 1585 METERS SOUNDING ID 5103

DATE 08/07/77 TIME 05 20MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	571.	0.82	0.0

***** UTAH UAUB ELEV 1585 METERS SOUNDING ID 5101

DATE 08/07/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
114.	229.	0.0	-1.10

***** UTAH UAUB ELEV 1585 METERS SOUNDING ID 5282

DATE 08/09/77 TIME 05 21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	571.	0.91	0.0

***** UTAH UAUB ELEV 1585 METERS SOUNDING ID 5292

DATE 08/09/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
1001.	1344.	0.0	-1.03

***** UTAH UAUB ELEV 1585 METERS SOUNDING ID 5290

DATE 08/11/77 TIME 05 227ST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE INV TOP INV DT/DZ DT/DZ BELOW INV
METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M

UTAH UAUB

ELEV 1585 METERS

OUNDING ID 5290

DATE 08/11/77 TIME 05 227ST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
------------------------	-----------------------	---------------------------	---------------------------------

0.	229.	1.19	0.0
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UTAH UAUB ELEV 1585 METERS SOUNDING ID 5288

DATE 08/11/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
------------------------	-----------------------	---------------------------	---------------------------------

553.	1049.	0.48	-1.06
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UTAH UAUB ELEV 1585 METERS SOUNDING ID 5281

DATE 08/13/77 TIME 05 26MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
------------------------	-----------------------	---------------------------	---------------------------------

0.	419.	0.97	0.0
----	------	------	-----

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5291

DATE 08/13/77 TIME 13 54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
------------------------	-----------------------	---------------------------	---------------------------------

440.	478.	0.0	-1.15
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UTAH UAUB ELEV 1585 METERS SOUNDING ID 5289

DATE 08/15/77 TIME 05 26MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
------------------------	-----------------------	---------------------------	---------------------------------

0.	305.	1.18	0.0
----	------	------	-----

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5287

DATE 08/17/77 TIME 05 29MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

DATE 08/17/77 TIME 05 29MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	305.	0.56	0.0

***** UTAH UAUB ELEV 1585 METERS SOUNDING ID 5277

DATE 08/19/77 TIME 05 32MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	343.	0.53	0.0

***** UTAH UAUB ELEV 1585 METERS SOUNDING ID 5275

DATE 08/19/77 TIME 13 52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-2.38
100.	250.	-0.89
250.	500.	-0.99
500.	750.	-1.02
750.	1000.	-0.23
1000.	1500.	-0.24

***** UTAH UAUB ELEV 1585 METERS SOUNDING ID 5285

DATE 08/21/77 TIME 05 33MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	343.	0.66	0.0

***** UTAH UAUB ELEV 1585 METERS SOUNDING ID 5283

DATE 08/21/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
644.	759.	0.0	-0.94

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5278

DATE 08/23/77 TIME 05 35MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	457.	0.77	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5286

DATE 08/25/77 TIME 05 36MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
152.	343.	0.0	-0.30

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5284

DATE 08/25/77 TIME 13 42MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
1011.	1049.	0.0	-0.80

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5274

DATE 08/27/77 TIME 05 38MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-0.82
100.	250.	-0.79
250.	500.	-0.59
500.	750.	-0.53
750.	1000.	-0.46
1000.	1500.	-0.61

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5272

DATE 08/27/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-1.24
100.	250.	-0.50

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5272

DATE 08/27/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0,	100,	-1.24
100,	250,	-0.50
250,	500,	-0.37
500,	750,	-0.33
750,	1000,	-0.33
1000,	1500,	-0.51

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5270

DATE 08/29/77 TIME 05 40MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0,	381,	1.18	0,0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5280

DATE 08/29/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0,	100,	-2.07
100,	250,	-0.60
250,	500,	-0.95
500,	750,	-0.56
750,	1000,	-0.43
1000,	1500,	-0.51

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5273

DATE 08/31/77 TIME 05 42MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0,	114,	2.01	0,0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5271

DATE 08/31/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5271

DATE 08/31/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
1002.	1344.	0.0	-0.79

MONTH AUGUST

YEAR 1977

UTAH UAUB

ELEV 1585 METERS

HOLZWORTH'S CLASSIFICATION SCHEME FOR INVERSIONS
MODIFIED TO SHOW TOTAL NUMBER INSTEAD OF PERCENT

		INVERSION BASE HEIGHT (M)							
		101 - 250	501 - 750	1000 - 1500	1501 - 2000	2001 - 2500	2501 - 3000	TOTAL	
THICKNESS (METERS)	SFC	100	0	1	0	1	0	0	2
1 - 100		0	0	0	0	0	0	0	0
101 - 250		2	0	2	1	1	0	0	8
251 - 500		7	0	0	1	0	2	0	10
501 - 750		4	0	0	0	0	0	0	4
751 - 1000		0	0	0	0	0	0	0	0
1001 - 1500		0	0	0	0	0	0	0	0
> 1500		0	0	0	0	0	0	0	0
INV TOTAL		13	0	2	1	3	1	4	24
DT/DZ 5		0	1	0	0	0	0	0	0
FROM INV 4		0	0	0	1	0	0	0	1
BASE 3		0	1	1	2	1	3	0	8
TO 2		0	0	0	0	0	0	0	0
SFC 1		0	0	0	0	0	0	0	0
NO INV TOT		5	5	5	5	5	5	DT/DZ (DEG C) / 100 M	
DT/DZ FOR 5		0	0	1	2	1	5 = 0 . 00	T0 -0 , 40	
SAME 4		0	3	1	2	2	4 = -0 . 41	T0 -0 , 80	
LAYERS 3		1	2	3	2	1	3 = -0 . 81	T0 -1 , 20	
AS INV 2		1	0	0	0	0	2 = -1 . 21	T0 -1 , 60	
BASE 1		3	0	0	0	0	1 = <-1 , 60		

MONTH AUGUST YEAR 1977

UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	SPEED (METER/SEC)			TOTAL
			7-10	11-16	17-21	
N	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0
Avg Speed	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 29 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH AUGUST

YEAR 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg SPEED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE B STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 29 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH AUGUST YEAR 1977

UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	SPEED (METER/SEC)			GREATER THAN 21	AVERAGE SPEED	TOTAL
		4-6	7-10	11-16			
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg SPEED	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 29 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH AUGUST

YEAR 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	C-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.08
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.08
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.08	0.06	0.0	0.0	0.0	0.0	0.0	0.15
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.08	0.46	0.0	0.0	0.0	0.0	4.0	0.54
NW	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.08
NNW	0.08	0.0	0.0	0.0	0.0	0.0	0.0	0.08
Avg Speed	1.9	4.4	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.46	0.54	0.0	0.0	0.0	0.0	0.0	1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE D STABILITY CLASS IS 0.50

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 500 M OF TEMP AND WIND DATA 29 SOUNDINGS DID NOT HAVE

MONTH AUGUST

YEAR 1977

SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	4-6	SPEED (METER/SEC)			GREATER THAN 21	AVERAGE SPEED	TOTAL
			7-10	11-16	17-21			
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.15	0.08	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.46	0.0	0.0	0.0	0.0	0.0	2.0	0.46
S	0.08	0.0	0.0	0.0	0.0	0.0	2.8	0.08
SSW	0.0	0.08	0.0	0.0	0.0	0.0	3.7	0.08
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.08	0.0	0.0	0.0	0.0	0.0	1.5	0.08
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.08	0.0	0.0	0.0	0.0	0.0	1.6	0.08
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Avg Speed	2.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.85	0.15	0.0	0.0	0.0	0.0	0.0	1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE E STABILITY CLASS IS 0.50

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 29 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH AUGUST YEAR 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC)			GREATER THAN 21	AVERAGE SPEED	TOTAL
	0-3	4-6	7-10			
N	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0
Avg Speed	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0	0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 500 M OF TEMP AND WIND DATA
29 SOUNDINGS DID NOT HAVE

MONTH AUGUST

YEAR 1977

SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	0-3	SPEED (METER/SEC)			GREATER THAN 21	AVERAGE SPEED	TOTAL
		4-6	7-10	11-16			
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.04	0.0	0.0	0.0	0.0	0.0	0.04
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.08	0.04	0.0	0.0	0.0	0.0	0.12
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.27	0.0	0.0	0.0	0.0	0.0	0.27
S	0.04	0.0	0.0	0.0	0.0	0.0	0.04
SSW	0.0	0.04	0.0	0.0	0.0	0.0	0.04
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.08	0.04	0.0	0.0	0.0	0.0	0.12
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.04	0.25	0.0	0.0	0.0	0.0	0.27
NW	0.08	0.0	0.0	0.0	0.0	0.0	0.08
NNW	0.04	0.0	0.0	0.0	0.0	0.0	0.04
Avg Speed	2.0	4.4	0.0	0.0	0.0	0.0	0.0
Total	0.65	0.35	0.0	0.0	0.0	0.0	1.00

NORMALIZED FREQUENCY DISTRIBUTION INDEPENDENT OF STABILITY

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 29 SOUNDINGS DID NOT HAVE
500 M OF TEMP AND WIND DATA

UTAH UAJB

ELEV 1585 METERS

SOUNDING ID 5115

DATE 08/01/77 TIME 05 16 MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		12.09		0.0		4.1	160.
1.0	150	1735	16.61	4.52	8.91	11.83	5.8	164.
2.0	300	1885	17.54	0.93	0.0	2.93	2.2	207.
2.7	415.	2000.	17.54	0.0	0.0	2.93	1.8	208.
3.3	500	2085	17.54	0.0	-0.53	2.40	1.0	144.
6.0	915.	2500.	15.92	-1.52	-1.07	1.86	6.3	81.
9.3	1415.	3000.	13.28	-2.72	-2.16	0.77	3.7	69.
15.8	2415.	4000.	7.46	-5.83	-2.39	0.53		
22.4	3415.	5000.	0.64	-6.82	-1.70	1.23		
28.9	4415.	6000.	-4.96	-5.61	-3.26	-0.33		

UTAH UAJB

ELEV 1585 METERS

SOUNDING ID 5115

DATE 08/01/77 TIME 05 16 MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585,	-1.4	3.9	4.1	160.
0.5	75.	1661.	-2.4	5.0	5.5	154.
1.0	152.	1737,	-1.6	5.6	5.8	164.
1.5	229.	1814,	0.4	2.7	2.7	189.
2.0	305.	1890.	1.0	1.9	2.2	208.
2.5	381.	1966.	0.8	1.6	1.8	207.
3.0	457.	2042.	0.8	1.5	1.7	208.
3.5	533.	2118.	-0.4	0.0	0.4	94.
4.0	610.	2195,	-2.6	0.0	2.6	91.
4.5	686.	2271.	-4.3	-0.3	4.3	86.
5.0	762.	2347.	-6.4	0.6	6.4	96.
5.5	838.	2423.	-6.3	0.1	6.3	91.
6.0	914.	2499.	-6.2	-1.0	6.3	81.
6.5	991.	2576.	-5.7	-0.3	5.7	87.
7.0	1067.	2652.	-4.6	-0.3	4.6	86.
7.5	1143.	2728.	-4.0	-0.7	4.1	80.
8.0	1219.	2804.	-3.5	-0.9	3.6	75.
8.5	1295.	2880.	-3.1	-1.1	3.3	71.
9.0	1372.	2957.	-3.2	-1.2	3.4	69.
9.5	1448.	3033.	-3.7	-1.4	4.0	70.
10.0	1524.	3109.	-3.4	-2.0	3.9	59.
10.5	1600.	3185.	-1.4	-2.9	3.3	26.
11.0	1676.	3261.	-0.6	-3.4	3.5	9.
11.5	1753.	3338.	-0.0	-4.4	4.4	0.
12.0	1829.	3414.	-0.6	-2.5	2.5	14.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5106

DATE 08/01/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WE DEG
	SFC		31.33		0.0		2.6	270
0.8	150	1735	28.51	-2.82	-3.31	-0.38	7.1	280
1.7	300	1885	27.66	-0.84	-3.01	-0.08	5.4	300
2.4	415.	2000.	26.46	-1.17	-4.20	-1.27	2.5	280
2.8	500	2085	25.31	-1.17	-4.73	-1.81	1.4	270
4.7	915.	2500.	21.09	-3.78	-2.25	0.68	2.9	270
7.9	1415.	3000.	19.32	-2.21	-1.57	1.36	4.3	280
14.5	2415.	4000.	12.55	-6.77	-1.80	1.12		
21.0	3415.	5000.	9.05	-3.50	-1.83	1.10		
27.6	4415.	6000.	3.03	-6.02	-1.87	1.06		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5106

DATE 08/01/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.6	0.0	2.6	270.
0.5	76.	1661.	5.4	-0.4	5.4	274.
1.0	195.	1780.	7.5	-2.9	8.1	291.
1.5	275.	1860.	4.6	-3.2	5.6	305.
2.0	352.	1937.	4.0	-3.0	5.0	307.
2.5	435.	2020.	1.7	-0.4	1.7	282.
3.0	550.	2135.	1.2	-0.0	1.2	272.
3.5	670.	2255.	0.2	-0.3	0.3	324.
4.0	787.	2372.	0.7	-1.1	1.3	325.
4.5	888.	2473.	2.1	-0.1	2.1	272.
5.0	969.	2554.	4.2	-0.6	4.3	277.
5.5	1046.	2631.	4.0	-0.7	4.1	279.
6.0	1122.	2707.	4.0	-0.7	4.0	280.
6.5	1198.	2783.	3.9	-1.1	4.1	286.
7.0	1274.	2859.	4.2	-1.5	4.4	290.
7.5	1350.	2935.	4.1	-1.3	4.3	287.
8.0	1427.	3012.	4.1	-1.1	4.3	286.
8.5	1503.	3088.	5.2	-1.2	5.4	283.
9.0	1579.	3164.	4.8	-1.0	5.0	282.
9.5	1655.	3240.	3.6	-0.5	3.6	277.
10.0	1731.	3316.	3.0	-0.5	3.1	279.
10.5	1808.	3393.	3.3	-0.5	3.3	279.
11.0	1884.	3469.	3.5	-1.0	3.6	286.
11.5	1960.	3545.	4.5	-2.1	4.9	295.
12.0	2036.	3621.	5.3	-2.3	5.8	293.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5104

DATE 08/03/77 TIME 05 12MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.92		0.0		2.1	160
1.0	150	1735	16.18	2.26	4.43	7.36	2.4	124
2.0	300	1885	18.42	2.24	2.28	5.21	2.6	159
2.7	415.	2000.	18.87	0.36	0.88	3.80	2.4	164
3.3	500	2085	19.14	0.35	0.87	3.80	2.4	176
6.0	915.	2500.	18.25	-0.79	-0.70	2.23	4.6	108
9.3	1415.	3000.	16.82	-1.52	-1.42	1.51	3.4	175
15.8	2415.	4000.	10.25	-6.57	-2.37	0.56		
22.4	3415.	5000.	2.36	-7.89	-2.44	0.49		
28.6	4415.	6000.	-5.94	-8.30	-3.85	-0.92		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5104

DATE 08/03/77 TIME 05 12MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.7	1.9	2.1	160.
0.5	76.	1661.	-2.7	3.3	4.2	140.
1.0	152.	1737.	-2.0	1.3	2.3	123.
1.5	229.	1814.	-0.5	0.9	1.0	155.
2.0	305.	1890.	-0.9	2.5	2.7	159.
2.5	381.	1966.	-0.7	2.4	2.5	164.
3.0	457.	2042.	-0.7	2.2	2.3	163.
3.5	533.	2118.	0.2	2.5	2.5	185.
4.0	610.	2195.	0.3	2.6	2.6	187.
4.5	686.	2271.	-1.0	3.3	3.5	164.
5.0	762.	2347.	-2.4	2.3	3.3	134.
5.5	838.	2423.	-3.0	1.4	3.3	114.
6.0	914.	2499.	-4.4	1.4	4.6	108.
6.5	991.	2576.	-4.0	2.3	4.6	120.
7.0	1067.	2652.	-3.6	2.1	4.1	120.
7.5	1143.	2728.	-3.4	1.4	3.7	112.
8.0	1219.	2804.	-2.7	1.1	3.0	113.
8.5	1295.	2880.	-2.3	2.0	3.0	132.
9.0	1372.	2957.	-0.9	3.0	3.2	163.
9.5	1448.	3033.	0.3	3.5	3.5	184.
10.0	1524.	3109.	1.9	3.5	4.0	208.
10.5	1600.	3185.	2.1	4.2	4.7	205.
11.0	1676.	3261.	2.4	4.3	4.9	209.
11.5	1753.	3338.	2.3	4.7	5.2	207.
12.0	1829.	3414.	2.1	4.4	4.9	206.

UTAH UAUR

ELEV 1585 METERS

SOUNDING ID 5108

DATE 08/03/77 TIME 13 50NST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		31.33		0.0		11.3	270
0.8	150	1735	28.92	-2.41	-3.31	-0.38	4.7	281
1.6	300	1885	27.59	-1.33	-5.03	-2.10	3.6	236
2.2	415.	2000.	25.43	-1.26	-6.76	-3.83	4.5	235
2.5	500	2085	25.45	-0.88	-5.76	-3.83	5.7	275
4.3	915.	2500.	21.35	-4.09	-1.73	1.20	7.4	251
7.4	1415.	3000.	18.87	-2.48	-3.50	-0.57	6.9	271
13.6	2415.	4000.	12.10	-6.78	-1.99	0.94		
19.5	3415.	5000.	3.32	-8.78	-2.43	0.50		
26.1	4415.	6000.	-1.09	-4.40	-2.09	0.84		

UTAH UAUR

ELEV 1585 METERS

SOUNDING ID 5108

DATE 08/03/77 TIME 13 50NST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	11.3	0.0	11.3	270,
0.5	76.	1661.	4.1	-0.8	4.2	282,
1.0	191.	1776.	4.8	-1.0	4.9	281,
1.5	275.	1860.	3.4	-0.9	3.5	285,
2.0	370.	1955.	3.6	-1.3	3.9	290,
2.5	509.	2094.	5.8	-0.4	5.8	274,
3.0	670.	2255.	8.5	0.6	8.5	266,
3.5	789.	2374.	6.1	1.9	6.4	253,
4.0	874.	2459.	5.8	2.4	6.3	247,
4.5	951.	2536.	8.0	2.4	8.3	253,
5.0	1027.	2612.	8.6	2.3	9.1	256,
5.5	1103.	2688.	9.1	2.0	9.4	258,
6.0	1179.	2764.	9.5	1.1	9.6	263,
6.5	1255.	2840.	9.2	0.1	9.2	270,
7.0	1338.	2923.	10.1	0.4	10.1	267,
7.5	1426.	3011.	6.5	-0.1	6.5	271,
8.0	1515.	3100.	6.0	-0.1	6.0	271,
8.5	1605.	3190.	8.6	1.1	8.7	263,
9.0	1695.	3280:	10.1	1.3	10.2	263,
9.5	1785.	3370.	8.2	0.2	8.2	269,
10.0	1861.	3446.	8.7	-1.3	8.8	279,
10.5	1937.	3522.	13.6	-0.2	13.6	271,
11.0	2013.	3598.	14.9	-0.3	15.0	271,
11.5	2090.	3675.	13.4	-0.9	13.5	274,
12.0	2166.	3751.	12.2	-0.2	12.2	271,

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5107

DATE 08/05/77 TIME 05 19MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		17.00		0.0		2.6	330
1.0	150	1735	16.00	-1.00	-1.97	0.96	M	M
2.0	300	1885	15.00	-1.00	-1.77	1.16	M	M
2.7	415.	2000.	14.40	-0.60	-1.18	1.75	M	M
3.3	500	2085	14.01	-0.39	-1.38	1.55	M	M
6.0	915.	2500.	13.31	-0.70	-1.97	0.96	M	M
9.3	1415.	3000.	11.00	-2.31	-1.57	1.35	M	M
15.8	2415.	4000.	4.00	-7.00	-1.97	0.96		
22.3	3415.	5000.	-5.00	-9.00	-3.15	-0.22		
28.3	4415.	6000.	-11.20	-6.20	-0.39	2.53		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5107

DATE 08/05/77 TIME 05 19MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.3	-2.2	2.6	330.

UTAH UAUS

ELEV 1585 METERS

SOUNDING ID 5105

DATE 08/05/77 TIME 12 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WI DEG
	SFC		25.43		0.0		4.1	270
0.7	150	1735	22.13	-3.30	-5.88	-2.95	3.9	289
1.1	300	1885	20.69	-1.44	-5.23	-2.30	4.6	303
1.5	415.	2000.	18.43	-1.46	-7.21	-4.28	2.5	324
1.8	500	2085	18.52	-0.71	-7.21	-4.28	2.6	324
3.4	915.	2500.	15.19	-3.32	-1.43	1.50	3.4	228
6.6	1415.	3000.	13.01	-1.91	-1.80	1.13	11.2	233
13.2	2415.	4000.	7.18	-6.11	-1.84	1.09		
19.8	3415.	5000.	0.36	-6.82	-3.40	-0.47		
25.6	4415.	6000.	-5.36	-5.72	1.15	4.08		

UTAH UAUS

ELEV 1585 METERS

SOUNDING ID 5105

DATE 08/05/77 TIME 12 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	4.1	0.0	4.1	270.
0.5	76.	1661.	2.9	-0.8	3.0	285.
1.0	261.	1846.	4.8	-2.3	5.3	295.
1.5	406.	1991.	1.5	-2.0	2.5	324.
2.0	573.	2158.	1.6	-2.1	2.7	324.
2.5	750.	2335.	2.6	-0.6	2.7	282.
3.0	860.	2445.	1.7	1.3	2.2	234.
3.5	936.	2521.	2.8	2.7	3.8	226.
4.0	1012.	2597.	2.9	4.3	5.2	214.
4.5	1088.	2673.	4.9	5.6	7.5	221.
5.0	1164.	2749.	7.2	6.6	9.7	228.
5.5	1241.	2826.	8.9	6.8	11.2	233.
6.0	1317.	2902.	8.8	6.8	11.1	233.
6.5	1394.	2979.	9.0	6.8	11.3	233.
7.0	1470.	3055.	8.9	6.5	11.0	234.
7.5	1546.	3131.	8.7	6.1	10.6	235.
8.0	1623.	3208.	9.8	6.4	11.7	237.
8.5	1699.	3284.	10.0	6.2	11.8	238.
9.0	1775.	3360.	10.2	6.4	12.1	238.
9.5	1851.	3436.	12.0	6.1	13.5	243.
10.0	1927.	3512.	12.9	6.1	14.3	245.
10.5	2004.	3589.	14.3	7.0	15.9	244.
11.0	2080.	3665.	14.5	6.4	15.8	246.
11.5	2156.	3741.	15.8	7.3	17.4	245.
12.0	2232.	3817.	16.5	7.4	18.1	246.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5103

DATE 08/07/77 TIME 05 20MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.10		0.0		2.6	160
1.0	150	1735	15.72	2.62	5.34	8.27	2.4	136
2.0	300	1885	17.09	1.36	1.41	4.34	2.1	147
2.7	415.	2000.	17.54	0.27	0.88	3.81	3.3	191
3.3	500	2085	17.80	0.45	0.0	2.93	4.2	215
6.0	915.	2500.	16.64	-0.70	-2.47	0.45	7.7	262
9.3	1415.	3000.	13.92	-3.18	-1.43	1.49	8.6	256
15.8	2415.	4000.	7.00	-6.93	-3.13	-0.21		
22.1	3415.	5000.	-1.57	-8.57	-1.33	1.60		
28.2	4415.	6000.	-8.10	-6.53	-4.84	-1.92		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5103

DATE 08/07/77 TIME 05 20MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.9	2.4	2.6	160.
0.5	76.	1661.	-0.9	2.4	2.6	159.
1.0	152.	1737.	-1.7	1.7	2.4	135.
1.5	229.	1814.	-1.3	1.5	1.9	140.
2.0	305.	1890.	-1.2	1.8	2.1	147.
2.5	381.	1966.	0.0	2.9	2.9	181.
3.0	457.	2042.	1.4	3.4	3.7	203.
3.5	533.	2118.	3.3	3.3	4.7	225.
4.0	610.	2195.	5.2	2.7	5.8	242.
4.5	686.	2271.	6.5	2.5	7.0	249.
5.0	762.	2347.	8.0	2.2	8.3	255.
5.5	838.	2423.	8.4	0.9	8.5	264.
6.0	914.	2499.	7.6	1.1	7.7	262.
6.5	991.	2576.	6.9	1.0	7.0	262.
7.0	1067.	2652.	6.8	1.3	6.9	259.
7.5	1143.	2728.	6.9	1.5	7.1	258.
8.0	1219.	2804.	6.9	1.9	7.2	255.
8.5	1295.	2880.	7.4	2.1	7.7	254.
9.0	1372.	2957.	8.3	2.3	8.6	254.
9.5	1448.	3033.	8.4	1.9	8.6	257.
10.0	1524.	3109.	8.8	2.5	9.1	254.
10.5	1600.	3185.	8.5	3.6	9.2	247.
11.0	1676.	3261.	7.7	4.2	8.7	241.
11.5	1753.	3338.	7.2	4.9	8.7	236.
12.0	1829.	3414.	7.6	4.8	9.0	238.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5101

DATE 08/07/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WI DEC
	SFC		29.25		0.0		5.1	235
1.0	150	1735	27.99	-1.26	-0.83	2.10	5.6	246
2.0	300	1885	27.23	-0.76	-2.50	0.42	3.4	210
2.7	415.	2000.	26.37	-0.68	-1.01	1.92	6.0	242
3.3	500	2085	26.21	-0.34	-1.01	1.92	9.8	25.
6.0	915.	2500.	23.71	-2.05	-3.41	-0.48	9.8	247
9.1	1415.	3000.	18.87	-4.83	-0.87	2.06	8.5	208
15.5	2415.	4000.	14.39	-4.94	-3.04	-0.11		
20.8	3415.	5000.	5.59	-8.80	-3.71	-0.78		
26.9	4415.	6000.	-2.05	-7.64	-5.71	-2.79		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5101

DATE 08/07/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585,	4.2	3.0	5.1	235.
0.5	76.	1661.	3.3	1.5	3.7	246.
1.0	152.	1737.	5.1	2.3	5.6	246.
1.5	229.	1814.	4.2	3.0	5.2	235.
2.0	305.	1890.	1.6	2.9	3.3	209.
2.5	381.	1966.	3.1	2.6	4.1	230.
3.0	457.	2042.	8.2	2.1	8.5	256.
3.5	533.	2118.	10.3	3.5	10.9	251.
4.0	610.	2195.	9.7	4.5	10.7	245.
4.5	686.	2271.	10.7	4.6	11.7	247.
5.0	762.	2347.	11.8	6.5	13.5	241.
5.5	838.	2423.	6.5	4.0	7.6	238.
6.0	914.	2499.	9.0	3.8	9.8	247.
6.5	994.	2579.	4.0	7.2	8.3	209.
7.0	1075.	2660.	1.5	5.2	5.4	196.
7.5	1151.	2736.	3.1	5.4	6.3	210.
8.0	1229.	2814.	0.4	4.7	4.7	185.
8.5	1314.	2899.	1.8	6.5	6.8	196.
9.0	1403.	2988.	3.3	6.5	7.3	207.
9.5	1485.	3070.	9.1	12.1	15.1	217.
10.0	1561.	3146.	10.2	13.5	16.9	217.
10.5	1637.	3222.	9.3	12.9	15.9	216.
11.0	1714.	3299.	10.3	13.8	17.3	217.
11.5	1790.	3375.	8.9	13.8	16.5	213.
12.0	1866.	3451.	8.8	13.5	16.1	213.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5282

DATE 08/09/77 TIME 05 21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WI DEG
	SFC		11.17		0.0		1.5	180
1.0	150	1735	14.82	3.65	2.50	5.43	2.0	221
2.0	300	1885	15.73	0.91	1.42	4.35	3.0	273
2.7	415.	2000.	16.10	0.27	0.71	3.64	1.6	293
3.3	500	2085	16.27	0.27	0.18	3.11	0.9	248
6.0	915.	2500.	14.47	-1.61	-1.43	1.50	6.4	71
9.3	1415.	3000.	12.46	-2.19	-0.72	2.21	4.4	153
15.8	2415.	4000.	6.52	-5.94	-1.48	1.45		
22.4	3415.	5000.	-0.70	-7.23	-1.52	1.41		
27.5	4415.	6000.	-8.40	-7.69	0.0	2.93		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5282

DATE 08/09/77 TIME 05 21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	1.5	1.5	180.
0.5	76.	1661.	-0.2	2.0	2.0	174.
1.0	152.	1737.	1.4	1.5	2.0	222.
1.5	229.	1814.	2.8	-0.3	2.8	276.
2.0	305.	1890.	3.1	-0.2	3.1	273.
2.5	381.	1966.	1.8	-1.0	2.0	299.
3.0	457.	2042.	1.0	-0.3	1.0	285.
3.5	533.	2118.	0.5	0.6	0.7	220.
4.0	610.	2195.	2.0	1.1	2.3	241.
4.5	686.	2271.	4.4	1.2	4.6	255.
5.0	762.	2347.	0.2	-6.2	6.2	358.
5.5	838.	2423.	-10.9	0.2	10.9	91.
6.0	914.	2499.	-6.1	-2.0	6.4	71.
6.5	991.	2576.	-6.6	-1.9	6.9	74.
7.0	1067.	2652.	-6.4	-1.0	6.4	81.
7.5	1143.	2728.	-5.4	-0.3	5.4	87.
8.0	1219.	2804.	-4.4	0.8	4.5	101.
8.5	1295.	2880.	-3.9	1.9	4.4	116.
9.0	1372.	2957.	-2.7	3.7	4.6	144.
9.5	1448.	3033.	-1.5	4.0	4.3	159.
10.0	1524.	3109.	-0.1	4.2	4.2	179.
10.5	1600.	3185.	0.5	5.0	5.0	185.
11.0	1676.	3261.	0.8	5.1	5.2	189.
11.5	1753.	3338.	2.1	4.6	5.1	205.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5292
 DATE 08/09/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WI DEG
	SFC		30.50		0.0		5.1	271
0.9	150	1735	28.46	-2.04	-3.32	-0.39	3.9	289
1.8	300	1885	26.76	-1.70	-3.02	-0.09	4.1	297
2.5	415.	2000.	26.03	-0.73	-2.52	0.40	3.7	291
3.0	500	2085	25.03	-1.01	-3.40	-0.47	3.8	300
5.5	915.	2500.	21.09	-3.94	-3.46	-0.53	6.9	287
8.7	1415.	3000.	19.14	-1.77	-1.92	1.01	8.1	286
15.3	2415.	4000.	13.56	-5.76	-1.44	1.49		
21.7	3415.	5000.	7.46	-6.10	-0.18	2.74		
28.1	4415.	6000.	-0.41	-7.87	-1.89	1.04		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 5292
 DATE 08/09/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585,	5.1	0.0	5.1	270,
0.5	76.	1661.	2.7	-0.5	2.8	261,
1.0	171.	1756.	3.9	-1.5	4.2	291,
1.5	255.	1840.	3.8	-2.1	4.4	299,
2.0	340.	1925.	3.5	-1.6	3.9	295,
2.5	416.	2001.	3.5	-1.3	3.7	291,
3.0	492.	2077.	3.2	-1.9	3.7	301,
3.5	571.	2156.	4.0	-1.8	4.4	294,
4.0	658.	2243.	4.1	-2.0	4.5	296,
4.5	744.	2329.	3.7	-1.9	4.2	297,
5.0	832.	2417.	5.5	-2.7	6.2	296,
5.5	919.	2504.	6.7	-2.0	7.0	287,
6.0	1001.	2586.	6.6	-2.6	7.1	291,
6.5	1078.	2663.	10.3	-3.0	10.7	286,
7.0	1154.	2739.	13.4	-4.8	14.2	290,
7.5	1230.	2815.	12.9	-3.3	13.3	285,
8.0	1306.	2891.	11.3	-3.5	11.8	287,
8.5	1382.	2967.	7.9	-2.9	8.4	290,
9.0	1459.	3044.	7.5	-1.4	7.6	281,
9.5	1535.	3120.	8.3	-1.5	8.4	280,
10.0	1611.	3196.	8.0	-0.7	8.1	275,
10.5	1687.	3272.	7.3	1.6	7.5	258,
11.0	1763.	3348.	8.8	1.2	8.9	262,
11.5	1840.	3425.	6.5	2.2	6.9	251,
12.0	1916.	3501.	8.1	2.2	8.4	255,

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5290

DATE 08/11/77 TIME 05 227ST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.92		0.0		2.6	330
1.0	150	1735	16.45	2.53	2.66	5.59	3.7	282
2.0	300	1885	16.01	-0.44	-1.77	1.15	1.3	344
2.7	415.	2000.	15.56	-0.27	0.0	2.93	1.7	9
3.3	500	2085	15.73	-0.01	1.07	3.99	2.3	24
6.0	915.	2500.	14.92	-0.71	-1.07	1.86	4.1	251
9.3	1415.	3000.	13.19	-1.82	-1.08	1.85	3.5	228
15.8	2415.	4000.	9.88	-3.31	-1.82	1.10		
22.4	3415.	5000.	3.22	-6.66	-2.43	0.50		
28.7	4415.	6000.	-4.38	-7.60	-2.49	0.44		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5290

DATE 08/11/77 TIME 05 227ST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.3	-2.2	2.6	330.
0.5	76.	1661.	3.7	0.7	3.8	260.
1.0	152.	1737.	3.6	-0.8	3.7	283.
1.5	229.	1814.	1.6	-1.0	1.9	300.
2.0	305.	1890.	0.3	-1.3	1.3	347.
2.5	381.	1966.	-0.2	-1.3	1.4	8.
3.0	457.	2042.	-0.4	-2.2	2.2	9.
3.5	533.	2118.	-1.4	-2.0	2.5	34.
4.0	610.	2195.	-1.0	-0.9	1.4	46.
4.5	686.	2271.	0.4	-0.0	0.4	276.
5.0	762.	2347.	2.3	1.1	2.5	245.
5.5	838.	2423.	3.6	1.8	4.0	244.
6.0	914.	2499.	3.9	1.3	4.1	251.
6.5	991.	2576.	4.3	1.3	4.5	253.
7.0	1067.	2652.	4.4	1.6	4.7	250.
7.5	1143.	2728.	4.3	2.1	4.8	244.
8.0	1219.	2804.	4.5	1.8	4.8	248.
8.5	1295.	2880.	3.7	2.1	4.3	241.
9.0	1372.	2957.	2.8	2.5	3.8	228.
9.5	1448.	3033.	2.5	2.2	3.3	228.
10.0	1524.	3109.	1.9	2.7	3.2	215.
10.5	1600.	3185.	1.7	2.9	3.3	211.
11.0	1676.	3261.	1.8	2.9	3.4	212.
11.5	1753.	3338.	1.5	3.0	3.3	207.
12.0	1829.	3414.	1.4	3.0	3.3	206.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5288

DATE 08/11/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		32.15		0.0		3.1	330
0.7	150	1735	29.39	-2.76	-4.12	-1.19	1.8	244
1.4	300	1885	28.43	-0.96	-2.48	0.44	1.5	300
2.1	415.	2000.	27.14	-0.85	-3.34	-0.42	1.9	8
2.7	500	2085	26.73	-0.85	-0.84	2.09	2.6	129
5.4	915.	2500.	27.99	1.26	1.16	4.09	10.9	328
8.7	1415.	3000.	26.97	-0.84	-1.17	1.76	2.1	338
15.2	2415.	4000.	23.88	-3.26	2.05	4.97		
21.8	3415.	5000.	24.74	0.87	-1.19	1.74		
28.3	4415.	6000.	20.73	-4.01	-0.87	2.06		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5288

DATE 08/11/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.5	-2.7	3.1	330.
0.5	76.	1661.	1.1	0.8	1.4	233.
1.0	228.	1813.	2.2	0.6	2.3	255.
1.5	318.	1903.	0.9	-0.8	1.2	312.
2.0	394.	1979.	-0.1	-1.9	1.9	3.
2.5	473.	2058.	-0.8	-1.9	2.0	23.
3.0	553.	2138.	1.5	-3.4	3.7	336.
3.5	630.	2215.	1.9	-4.5	4.9	337.
4.0	706.	2291.	1.6	-6.8	7.0	347.
4.5	782.	2367.	3.2	-7.2	7.8	336.
5.0	858.	2443.	4.9	-8.8	10.0	331.
5.5	934.	2519.	6.1	-9.4	11.2	327.
6.0	1011.	2596.	5.8	-10.3	11.8	331.
6.5	1087.	2672.	5.6	-12.2	13.4	335.
7.0	1163.	2748.	6.2	-13.4	14.8	335.
7.5	1239.	2824.	3.4	-10.1	10.6	342.
8.0	1315.	2900.	3.3	-8.1	8.8	338.
8.5	1392.	2977.	0.3	-2.5	2.5	352.
9.0	1468.	3053.	1.0	-0.8	1.3	307.
9.5	1544.	3129.	1.9	-3.1	3.6	328.
10.0	1620.	3205.	5.5	-3.1	6.3	300.
10.5	1696.	3281.	3.8	-0.2	3.8	272.
11.0	1773.	3358.	4.7	-2.4	5.2	297.
11.5	1849.	3434.	5.2	-5.4	7.5	317.
12.0	1925.	3510.	5.6	-4.2	7.0	307.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5281

DATE 08/13/77 TIME 05 26MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEC
	SFC		13.01		0.0		3.1	160
1.0	150	1735	14.83	1.82	3.92	6.85	3.4	157
2.0	300	1885	17.08	2.25	1.77	4.70	1.6	129
2.7	415.	2000.	16.91	0.00	-1.24	1.69	2.4	177
3.3	500	2085	16.47	-0.62	-1.42	1.51	2.3	204
6.0	915.	2500.	16.19	-0.30	0.0	2.93	0.6	288
9.3	1415.	?3000.	13.74	-2.43	-1.62	1.31	5.3	13
15.8	2415.	4000.	8.02	-5.72	-1.84	1.09		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5281

DATE 08/13/77 TIME 05 26MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.1	2.9	3.1	160.
0.5	76.	1661.	-1.7	3.3	3.7	153.
1.0	152.	1737.	-1.3	3.2	3.4	158.
1.5	229.	1814.	-2.1	2.6	3.3	140.
2.0	305.	1890.	-1.2	0.9	1.5	129.
2.5	381.	1966.	-0.8	1.9	2.1	156.
3.0	457.	2042.	1.1	2.6	2.8	203.
3.5	533.	2118.	0.8	1.7	1.9	205.
4.0	610.	2195.	3.8	0.5	3.8	263.
4.5	686.	2271.	4.9	-0.7	4.9	278.
5.0	762.	2347.	4.0	-1.1	4.2	285.
5.5	838.	2423.	2.9	-0.6	3.0	282.
6.0	914.	2499.	0.6	-0.2	0.6	288.
6.5	991.	2576.	1.4	0.6	1.5	247.
7.0	1067.	2652.	2.5	0.3	2.5	264.
7.5	1143.	2728.	3.5	-0.1	3.5	271.
8.0	1219.	2804.	3.3	-2.7	4.3	309.
8.5	1295.	2880.	-1.4	-4.6	4.8	16.
9.0	1372.	2957.	-1.3	-5.0	5.2	14.
9.5	1448.	3033.	-1.1	-5.3	5.4	12.
10.0	1524.	3109.	-0.9	-5.4	5.5	9.
10.5	1600.	3185.	-0.6	-5.4	5.4	7.
11.0	1676.	3261.	-0.1	-4.5	4.5	1.
11.5	1753.	3338.	0.2	-4.1	4.1	357.
12.0	1829.	3414.	0.2	-3.2	3.2	356.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5291

DATE 08/13/77 TIME 13 54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		30.50		0.0		4.1	160
0.8	150	1735	27.62	-2.88	-3.34	-0.41	3.8	159
1.6	300	1885	26.32	-1.30	-2.52	0.40	2.9	140
2.3	415.	2000.	25.43	-0.87	-2.19	0.73	1.2	188
2.9	500	2085	25.01	-0.44	-3.40	-0.47	1.1	226
4.6	915.	2500.	19.32	-4.78	-6.47	-3.54	2.5	242
6.3	1415.	3000.	15.28	-4.93	-5.34	-2.42	2.7	252
11.6	2415.	?4000.	6.06	-9.25	-3.15	-0.22	1.1	283
17.3	3415.	5000.	0.36	-5.70	-4.34	-1.41		
23.4	4415.	6000.	-1.09	-1.45	0.0	2.93		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5291

DATE 08/13/77 TIME 13 54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.4	3.9	4.1	160.
0.5	76.	1661.	-0.4	2.0	2.1	169.
1.0	207.	1792.	-2.6	4.5	5.2	150.
1.5	287.	1872.	-2.1	2.5	3.2	140.
2.0	363.	1948.	-0.8	1.0	1.3	140.
2.5	440.	2025.	0.6	1.0	1.1	210.
3.0	516.	2101.	0.8	0.7	1.1	230.
3.5	624.	2209.	0.5	1.2	1.3	204.
4.0	754.	2339.	0.9	1.2	1.5	216.
4.5	892.	2477.	2.0	1.3	2.3	238.
5.0	1068.	2653.	3.8	0.1	3.8	268.
5.5	1228.	2813.	2.5	0.7	2.6	255.
6.0	1345.	2930.	2.5	0.9	2.6	249.
6.5	1462.	3047.	2.7	0.8	2.8	253.
7.0	1593.	3178.	1.8	1.2	2.1	237.
7.5	1732.	3317.	1.8	1.2	2.2	236.
8.0	1847.	3432.	2.5	0.6	2.5	256.
8.5	1923.	3508.	3.2	0.5	3.3	261.
9.0	1999.	3584.	2.1	-0.3	2.1	278.
9.5	2080.	3665.	3.7	0.3	3.7	266.
10.0	2158.	3743.	2.8	-1.4	3.2	297.
10.5	2238.	3823.	1.6	-1.3	2.0	309.
11.0	2316.	3901.	1.4	-0.3	1.4	281.
11.5	2392.	3977.	1.1	-0.3	1.1	283.
12.0	2472.	4057.	1.1	-0.2	1.1	281.

DATE 08/15/77 TIME 05 26MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		15.74		0.0		1.5	180
1.0	150	1735	18.41	2.68	3.87	6.79	2.7	199
2.0	300	1885	19.32	0.90	-0.17	2.75	4.0	224
2.7	415.	2000.	18.61	-0.53	-1.40	1.53	5.0	221
3.3	500	2085	18.26	-0.53	-1.40	1.52	5.0	209
6.0	915.	2500.	16.28	-1.80	-1.42	1.51	7.3	222
9.3	1415.	3000.	14.10	-2.36	-1.43	1.50	8.9	237
15.8	2415.	4000.	7.18	-6.93	-2.58	0.35		
22.4	3415.	5000.	1.22	-5.97	-1.51	1.42		
29.0	4415.	6000.	-4.96	-6.18	-2.68	0.24		

DATE 08/15/77 TIME 05 26MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	1.5	1.5	180.
0.5	76.	1661.	0.3	2.8	2.9	186.
1.0	152.	1737.	0.9	2.5	2.7	200.
1.5	229.	1814.	0.9	2.1	2.3	204.
2.0	305.	1890.	2.9	2.9	4.1	225.
2.5	381.	1966.	3.6	3.6	5.1	225.
3.0	457.	2042.	2.9	3.8	4.8	217.
3.5	533.	2118.	2.0	4.8	5.2	202.
4.0	610.	2195.	3.0	5.7	6.4	208.
4.5	686.	2271.	3.0	5.9	6.7	207.
5.0	762.	2347.	2.6	6.3	6.8	202.
5.5	838.	2423.	2.6	6.0	6.6	204.
6.0	914.	2499.	4.9	5.4	7.2	222.
6.5	991.	2576.	6.8	5.8	9.0	230.
7.0	1067.	2652.	6.9	5.0	8.5	234.
7.5	1143.	2728.	7.4	4.7	8.7	237.
8.0	1219.	2804.	8.0	4.7	9.3	240.
8.5	1295.	2880.	7.3	5.3	9.0	234.
9.0	1372.	2957.	7.3	5.1	8.9	235.
9.5	1448.	3033.	7.5	4.7	8.8	238.
10.0	1524.	3109.	7.0	3.7	7.9	242.
10.5	1600.	3185.	7.8	4.0	8.8	243.
11.0	1676.	3261.	7.5	3.6	8.3	244.
11.5	1753.	3338.	6.5	3.7	7.5	240.
12.0	1829.	3414.	6.3	4.0	7.4	238.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5287

DATE 08/17/77 TIME 05 29MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WL DEG
	SFC		17.54		0.0		1.5	160
1.0	150	1735	18.87	1.34	1.75	4.68	1.5	152
2.0	300	1885	19.23	0.36	-0.17	2.75	2.8	97
2.7	415.	2000.	18.43	-0.53	-1.40	1.53	2.9	124
3.3	500	2085	18.26	-0.44	-0.88	2.05	3.2	143
6.0	915.	2500.	16.28	-1.79	-1.77	1.15	5.9	204
9.3	1415.	3000.	13.56	-2.90	-1.44	1.49	4.4	195
15.8	2415.	4000.	8.12	-5.45	-2.57	0.36		
22.4	3415.	5000.	0.83	-7.28	-2.07	0.86		
28.9	4415.	6000.	-5.45	-6.29	-3.84	-0.91		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5287

DATE 08/17/77 TIME 05 29MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.5	1.5	1.5	160.
0.5	76.	1661.	-0.9	2.1	2.3	157.
1.0	152.	1737.	-0.7	1.3	1.5	152.
1.5	229.	1814.	-0.9	0.0	0.9	92.
2.0	305.	1890.	-2.9	0.4	2.9	98.
2.5	381.	1966.	-2.6	1.3	2.9	117.
3.0	457.	2042.	-2.2	2.0	3.0	133.
3.5	533.	2118.	-1.6	3.0	3.4	152.
4.0	610.	2195.	-0.4	3.1	3.1	173.
4.5	686.	2271.	-0.2	3.6	3.6	177.
5.0	762.	2347.	-0.1	4.5	4.5	178.
5.5	838.	2423.	1.2	5.0	5.1	193.
6.0	914.	2499.	2.4	5.4	5.9	204.
6.5	991.	2576.	2.5	4.5	5.2	209.
7.0	1067.	2652.	2.7	4.2	5.0	213.
7.5	1143.	2728.	2.6	4.4	5.1	210.
8.0	1219.	2804.	1.7	4.2	4.5	202.
8.5	1295.	2880.	1.4	4.3	4.6	198.
9.0	1372.	2957.	1.3	4.7	4.9	195.
9.5	1448.	3033.	1.0	3.8	4.0	194.
10.0	1524.	3109.	0.8	3.0	3.1	195.
10.5	1600.	3185.	0.5	2.5	2.5	192.
11.0	1676.	3261.	0.1	2.7	2.7	182.
11.5	1753.	3338.	-0.4	3.0	3.0	172.
12.0	1829.	3414.	-1.0	2.2	2.4	155.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5277

DATE 08/19/77 TIME 05 32MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WT DEG
	SFC		13.47		0.0		1.5	160
1.0	150	1735	15.28	1.81	1.78	4.71	2.4	156
2.0	300	1885	15.28	0.01	-0.36	2.57	0.7	247
2.7	415.	2000.	14.74	-0.45	-1.07	1.86	0.6	208
3.3	500	2085	14.57	-0.27	-0.54	2.39	0.9	190
6.0	915.	2500.	13.47	-0.90	-1.80	1.13	2.4	124
9.3	1415.	3000.	12.83	-0.83	-0.90	2.03	6.0	252
15.8	2415.	4000.	7.84	-4.99	-1.47	1.46		
22.4	3415.	5000.	2.74	-5.09	-1.50	1.43		
29.0	4415.	6000.	-0.90	-3.64	-0.95	1.98		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5277

DATE 08/19/77 TIME 05 32MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.5	1.5	1.5	160.
0.5	76.	1661.	-1.6	2.8	3.2	151.
1.0	152.	1737.	-1.0	2.2	2.4	156.
1.5	229.	1814.	0.4	0.2	0.5	247.
2.0	305.	1890.	0.6	0.3	0.7	247.
2.5	381.	1966.	0.3	0.3	0.4	218.
3.0	457.	2042.	0.2	0.8	0.8	196.
3.5	533.	2118.	0.1	1.0	1.0	186.
4.0	610.	2195.	-1.0	0.6	1.2	120.
4.5	686.	2271.	-2.4	0.4	2.4	98.
5.0	762.	2347.	-3.8	-0.6	3.8	81.
5.5	838.	2423.	-3.3	0.5	3.4	98.
6.0	914.	2499.	-2.0	1.3	2.4	124.
6.5	991.	2576.	-2.2	1.3	2.6	121.
7.0	1067.	2652.	-1.7	0.3	1.7	99.
7.5	1143.	2728.	-1.2	-0.0	1.2	88.
8.0	1219.	2804.	-1.5	3.3	3.6	155.
8.5	1295.	2880.	0.2	4.6	4.6	183.
9.0	1372.	2957.	4.2	3.1	5.2	234.
9.5	1448.	3033.	6.6	0.5	6.6	266.
10.0	1524.	3109.	7.0	0.8	7.0	264.
10.5	1600.	3185.	6.8	1.0	6.9	262.
11.0	1676.	3261.	7.4	1.2	7.5	261.
11.5	1753.	3338.	7.6	0.4	7.6	267.
12.0	1829.	3414.	7.3	0.1	7.3	269.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5275

DATE 08/19/77 TIME 13 52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		27.14		0.0		4.1	330
0.8	150	1735	24.20	-2.94	-4.26	-1.33	3.2	319
1.4	300	1885	22.86	-1.35	-3.43	-0.50	1.3	322
2.1	415.	2000.	21.09	-1.30	-3.46	-0.53	1.9	323
2.6	500	2085	20.67	-0.88	-3.48	-0.55	3.1	337
5.1	915.	2500.	17.89	-2.69	-0.70	2.22	5.7	345
8.4	1415.	3000.	16.82	-1.17	-0.71	2.22	9.0	324
14.9	2415.	4000.	16.64	-0.18	0.0	2.93		
21.5	3415.	5000.	12.10	-4.54	-0.72	2.21		
28.1	4415.	6000,	7.46	-4.63	-3.68	-0.75		

UTAH UAUR

ELEV 1585 METERS

SOUNDING ID 5275

DATE 08/19/77 TIME 13 52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.1	-3.6	4.1	330.
0.5	76.	1661.	1.8	-2.6	3.2	325.
1.0	216.	1801.	2.3	-2.2	3.2	314.
1.5	314.	1899.	0.6	-0.8	1.0	323.
2.0	401.	1986.	1.1	-1.4	1.7	321.
2.5	488.	2073.	1.3	-2.7	3.0	335.
3.0	576.	2161.	0.8	-3.5	3.6	341.
3.5	665.	2250.	0.1	-3.4	3.4	358.
4.0	747.	2332.	-0.4	-3.3	3.3	7.
4.5	823.	2408.	1.0	-5.2	5.3	350.
5.0	900.	2485.	1.4	-5.5	5.7	346.
5.5	976.	2561.	1.5	-5.3	5.6	344.
6.0	1052.	2637.	1.8	-5.5	5.8	342.
6.5	1128.	2713.	1.0	-4.8	4.9	348.
7.0	1204.	2789.	2.0	-5.2	5.6	339.
7.5	1281.	2866.	3.4	-5.9	6.8	330.
8.0	1357.	2942.	4.5	-6.5	7.9	325.
8.5	1433.	3013.	5.5	-7.5	9.3	324.
9.0	1509.	3094.	5.2	-6.9	8.6	323.
9.5	1585.	3170.	5.9	-8.7	10.5	326.
10.0	1662.	3247.	5.7	-8.2	9.9	325.
10.5	1738.	3323.	5.5	-8.1	9.8	326.
11.0	1814.	3399.	4.8	-7.5	8.9	328.
11.5	1890.	3475.	4.8	-8.8	10.0	332.
12.0	1966.	3551.	7.9	-12.6	14.9	328.

UTAH UA UB

ELEV 1585 METERS

SOUNDING ID 5285

DATE 08/21/77 TIME 05 33MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WI DEC
	SFC		13.47		0.0		2.6	160
1.0	150	1735	14.82	1.36	2.50	5.43	3.4	172
2.0	300	1885	15.55	0.73	0.89	3.82	2.2	164
2.7	415.	2000.	15.47	0.00	-0.53	2.39	0.5	186
3.3	500	2085	15.38	-0.18	-0.53	2.39	0.6	185
6.0	915.	2500.	14.29	-1.00	-1.07	1.85	2.7	320
9.3	1415.	3000.	12.64	-1.73	-1.08	1.85	1.7	272
15.8	2415.	4000.	6.15	-6.50	-2.40	0.52		
22.4	3415.	5000.	0.16	-5.99	-1.89	1.04		
28.0	4415.	6000.	-8.10	-8.26	-4.64	-1.72		

UTAH UA UB

ELEV 1585 METERS

SOUNDING ID 5285

DATE 08/21/77 TIME 05 33MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.9	2.4	2.6	160.
0.5	76.	1661.	-1.3	3.3	3.5	158.
1.0	152.	1737.	-0.5	3.4	3.4	172.
1.5	229.	1814.	-0.7	3.2	3.3	168.
2.0	305.	1890.	-0.6	2.0	2.1	164.
2.5	381.	1966.	0.2	0.7	0.7	197.
3.0	457.	2042.	-0.0	0.3	0.3	172.
3.5	533.	2118.	0.2	0.9	0.9	194.
4.0	610.	2195.	1.4	1.3	1.9	227.
4.5	686.	2271.	2.2	0.8	2.4	250.
5.0	762.	2347.	2.3	-0.6	2.4	284.
5.5	838.	2423.	2.0	-1.6	2.6	308.
6.0	914.	2499.	1.7	-2.0	2.7	320.
6.5	991.	2576.	1.5	-1.0	1.8	304.
7.0	1067.	2652.	1.0	-0.8	1.2	308.
7.5	1143.	2728.	1.2	-1.3	1.8	319.
8.0	1219.	2804.	1.4	-2.3	2.7	329.
8.5	1295.	2880.	0.9	-2.7	2.8	342.
9.0	1372.	2957.	1.3	-0.7	1.5	298.
9.5	1448.	3033.	1.7	0.5	1.8	253.
10.0	1524.	3109.	2.2	2.4	3.2	223.
10.5	1600.	3185.	2.3	3.5	4.2	213.
11.0	1676.	3261.	2.8	3.8	4.7	216.
11.5	1753.	3338.	3.9	4.2	5.7	223.
12.0	1829.	3414.	4.6	4.0	6.1	229.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5283

DATE 08/21/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WI DEC
	SFC		27.14		0.0		2.6	330
0.8	150	1735	24.26	-2.88	-1.36	1.57	3.6	310
1.7	300	1885	23.71	-0.55	-2.39	0.53	3.2	268
2.5	415.	2000.	22.66	-1.04	-1.89	1.04	2.8	260
3.1	500	2085	22.15	-0.51	-2.42	0.51	4.4	271
5.8	915.	2500.	19.32	-2.82	-2.45	0.48	3.3	236
9.1	1415.	3000.	16.64	-2.42	-2.83	0.09	9.1	238
15.6	2415.	4000.	8.68	-8.24	-1.65	1.28		
22.2	3415.	5000.	3.31	-5.36	-2.24	0.69		
28.7	4415.	6000.	-3.02	-6.33	-2.86	0.06		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5283

DATE 08/21/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.3	-2.2	2.6	330.
0.5	76.	1661.	2.4	-1.5	2.9	302.
1.0	187.	1772.	2.8	-2.7	3.9	315.
1.5	263.	1848.	3.0	-0.5	3.0	279.
2.0	340.	1925.	3.3	0.8	3.4	256.
2.5	416.	2001.	2.8	0.3	2.8	263.
3.0	492.	2077.	4.2	-0.0	4.2	270.
3.5	568.	2153.	5.9	-0.4	5.9	274.
4.0	644.	2229.	4.5	0.5	4.5	263.
4.5	721.	2306.	2.9	1.3	3.2	245.
5.0	797.	2382.	2.5	2.1	3.3	230.
5.5	873.	2458.	2.4	2.4	3.4	225.
6.0	949.	2534.	3.0	1.4	3.3	245.
6.5	1025.	2610.	4.0	2.9	4.9	234.
7.0	1102.	2687.	5.2	4.2	6.7	231.
7.5	1178.	2763.	5.6	4.3	7.1	233.
8.0	1254.	2839.	6.7	5.0	8.4	233.
8.5	1330.	2915.	7.2	4.5	8.5	238.
9.0	1406.	2991.	7.7	4.9	9.1	237.
9.5	1483.	3068.	7.7	4.4	8.8	240.
10.0	1559.	3144.	7.0	3.6	7.9	243.
10.5	1635.	3220.	7.2	3.4	7.9	245.
11.0	1712.	3297.	7.6	3.4	8.4	246.
11.5	1788.	3373.	8.8	3.3	9.4	250.
12.0	1865.	3450.	9.0	3.0	9.5	252.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5278

DATE 08/23/77 TIME 05 35MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WL DEG
	SFC		13.92		0.0		2.1	160
1.0	150	1735	16.62	2.70	3.37	6.30	3.1	156
2.0	300	1885	17.18	0.55	0.71	3.63	1.1	176
2.7	415.	2000.	17.45	0.27	-0.71	2.22	0.5	207
3.3	500	2085	17.01	-0.44	-1.59	1.34	0.7	212
6.0	915.	2500,	14.38	-2.53	-1.07	1.85	2.1	271
9.3	1415.	3000.	12.28	-2.19	-1.81	1.12	7.9	277
15.8	2415.	4000.	5.21	-7.07	-2.41	0.52		
22.4	3415.	5000.	-1.76	-6.97	-2.85	0.08		
28.6	4415.	6000.	-11.35	-9.59	-3.12	-0.19		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5278

DATE 08/23/77 TIME 05 35MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.7	1.9	2.1	160.
0.5	76.	1661.	-1.6	4.4	4.7	160.
1.0	152.	1737.	-1.2	2.8	3.0	156.
1.5	229.	1814.	-0.4	1.9	2.0	168.
2.0	305.	1890.	-0.1	1.0	1.0	176.
2.5	381.	1966.	0.4	0.5	0.6	223.
3.0	457.	2042.	0.0	0.3	0.3	188.
3.5	533.	2118.	0.7	0.6	0.9	230.
4.0	610.	2195.	0.8	1.3	1.5	214.
4.5	686.	2271.	1.6	0.9	1.8	239.
5.0	762.	2347.	2.0	0.2	2.0	265.
5.5	838.	2423.	2.2	0.0	2.2	269.
6.0	914.	2499.	2.1	-0.0	2.1	271.
6.5	991.	2576.	2.2	0.3	2.2	262.
7.0	1067.	2652.	3.3	0.8	3.4	257.
7.5	1143.	2728.	4.8	1.1	4.9	257.
8.0	1219.	2804.	5.8	0.4	5.8	266.
8.5	1295.	2880.	6.8	-0.3	6.8	272.
9.0	1372.	2957.	7.6	-0.6	7.7	275.
9.5	1448.	3033.	7.9	-1.2	8.0	278.
10.0	1524.	3109.	8.3	-1.7	8.5	281.
10.5	1600.	3185.	8.1	-1.6	8.2	282.
11.0	1676.	3261.	8.3	-2.9	8.8	290.
11.5	1753.	3338.	8.4	-3.6	9.2	293.
12.0	1829.	3414.	7.5	-3.1	8.1	292.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5276

DATE 08/23/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		M				2.6	45
1.0	150	1735					0.2	93
2.0	300	1885					1.2	301
2.7	415.	2000.					2.2	285
3.3	500	2085					2.2	285
6.0	915.	2500.					1.8	283
9.3	1415.	3000.					5.1	249

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5276

DATE 08/23/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.8	-1.8	2.6	45.
0.5	76.	1661.	-0.3	-0.1	0.3	72.
1.0	152.	1737.	-0.2	0.0	0.2	94.
1.5	229.	1814.	2.0	-0.2	2.0	276.
2.0	305,	1890.	1.0	-0.6	1.2	302.
2.5	381.	1966.	1.9	-0.5	1.9	286.
3.0	457.	2042.	2.5	-0.6	2.6	284.
3.5	533.	2118.	1.8	-0.5	1.9	285.
4.0	610.	2195.	1.8	-0.4	1.9	283.
4.5	686.	2271.	2.6	-0.6	2.7	283.
5.0	762.	2347.	3.9	-0.8	4.0	282.
5.5	838.	2423.	1.2	-0.6	1.3	296.
6.0	914.	2499.	1.8	-0.4	1.8	283.
6.5	991.	2576,	1.9	-0.5	1.9	284.
7.0	1067.	2652.	2.8	0.4	2.8	262.
7.5	1143.	2728.	3.8	0.8	3.9	258.
8.0	1219.	2804.	4.4	1.3	4.6	254.
8.5	1295.	2880.	5.2	1.4	5.4	255.
9.0	1372.	2957.	4.8	1.5	5.0	253.
9.5	1448.	3033.	4.6	2.0	5.1	246.
10.0	1524.	3109.	4.4	2.2	4.9	244.
10.5	1600.	3185.	4.7	2.5	5.4	242.
11.0	1676.	3261.	4.6	2.7	5.3	240.
11.5	1753.	3338.	4.5	2.8	5.3	238.
12.0	1829.	3414.	4.8	2.5	5.4	242.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5286

DATE 08/25/77 TIME 05 36 MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WI DEC
	SFC		15.28		0.0		0.5	160
1.0	150	1735	14.83	-0.45	-0.54	2.39	M	M
2.0	300	1885	14.83	-0.00	-0.36	2.57	M	M
2.7	415.	2000.	14.47	-0.36	-1.43	1.50	M	M
3.3	500	2085	13.93	-0.54	-1.43	1.49	M	M
6.0	915.	2500.	12.28	-1.65	-1.26	1.66	M	M
9.3	1415.	3000.	9.88	-2.40	-1.46	1.47	M	M

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5286

DATE 08/25/77 TIME 05 36 MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.2	0.5	0.5	160.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5284

DATE 08/25/77 TIME 13 42MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WI DEG
	SFC		26.29		0.0		2.6	270
0.8	150	1735	23.51	-2.78	-2.05	0.88	3.4	263
1.6	300	1885	22.85	-0.66	-3.09	-0.17	2.8	237
2.4	415.	2000.	21.52	-1.30	-4.32	-1.39	1.9	203
2.8	500	2085	20.30	-1.25	-4.69	-1.76	2.2	204
5.1	915.	2500.	18.25	-1.95	-0.53	2.40	4.4	218
8.4	1415.	3000.	17.09	-1.25	-1.77	1.16	8.2	225
14.9	2415.	4000.	11.18	-5.91	-4.17	-1.25		
21.0	3415.	5000.	4.64	-6.54	-2.05	0.88		
27.5	4415.	6000.	-0.12	-4.76	-3.78	-0.85		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5284

DATE 08/25/77 TIME 13 42MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.6	0.0	2.6	270.
0.5	76.	1661.	1.3	-0.0	1.3	270.
1.0	201.	1786.	4.8	1.0	4.9	258.
1.5	277.	1862.	2.7	1.4	3.0	244.
2.0	354.	1939.	1.5	1.7	2.3	222.
2.5	437.	2022.	0.5	1.7	1.8	196.
3.0	558.	2143.	1.4	2.3	2.7	212.
3.5	668.	2253.	3.3	3.0	4.4	228.
4.0	744.	2329.	2.7	3.6	4.5	217.
4.5	820.	2405.	1.0	2.6	2.8	201.
5.0	897.	2482.	2.1	2.9	3.6	216.
5.5	973.	2558.	4.7	5.0	6.9	224.
6.0	1049.	2634.	6.4	5.4	8.3	230.
6.5	1125.	2710.	7.6	5.8	9.6	233.
7.0	1201.	2786.	6.4	5.5	8.4	229.
7.5	1278.	2863.	7.2	5.5	9.1	233.
8.0	1354.	2939.	7.2	4.3	8.4	239.
8.5	1430.	3015.	5.3	6.1	8.1	221.
9.0	1506.	3091.	4.4	8.1	9.2	209.
9.5	1582.	3167.	6.9	9.8	11.9	215.
10.0	1659.	3244.	7.5	9.6	12.2	218.
10.5	1735.	3320.	6.8	7.8	10.3	221.
11.0	1811.	3396.	7.5	9.0	11.8	220.
11.5	1887.	3472.	8.1	9.9	12.8	219.
12.0	1963.	3548.	6.9	8.9	11.3	218.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5274

DATE 08/27/77 TIME 05 38MST ASCENT RATE 500 FPM DATA INTERVAL 15 SE

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	W DE
	SFC		10.25		0.0		1.0	36
1.0	150	1735	8.96	-1.29	-2.38	0.55	M	M
2.0	300	1885	7.93	-1.03	-1.84	1.09	M	M
2.7	415.	2000,	7.18	-0.75	-1.84	1.09	M	M
3.3	500	2085	6.54	-0.64	-1.66	1.27	M	M
6.0	915,	2500.	4.65	-1.89	-1.67	1.25	M	M
9.3	1415,	3000.	1.51	-3.14	-1.88	1.05	M	M
15.8	2415.	4000.	-5.45	-6.96	-3.27	-0.34		
22.3	3415.	5000.	-14.24	-8.79	-2.95	-0.02		
28.9	4415.	6000.	-17.54	-3.31	-2.77	0.16		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5274

DATE 08/27/77 TIME 05 38MST ASCENT RATE 500 FPM DATA INTERVAL 15 SE

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	0.0	-1.0	1.0	360.

UTAH UAUR

ELEV 1585 METERS

SOUNDING ID 5272

DATE 08/27/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		16.64		0.0		4.6	270
1.0	150	1735	15.02	-1.62	-1.60	1.32	4.7	285
2.0	300	1885	14.47	-0.55	-1.07	1.86	6.4	290
2.7	415.	2000.	13.92	-0.45	-1.25	1.67	8.1	293
3.3	500	2085	13.57	-0.45	-1.08	1.85	6.2	287
6.0	915.	2500:	12.37	-1.20	-0.90	2.03	8.7	303
9.3	1415.	3000:	9.88	-2.48	-2.37	0.56	2.4	244
15.7	2415.	4000.	4.92	-4.97	-1.67	1.26		
22.3	3415.	5000.	-1.76	-6.68	-1.90	1.03		
28.8	4415.	6000.	-7.90	-6.14	-3.87	-0.94		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5272

DATE 08/27/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	4.6	0.0	4.6	270.
0.5	76.	1661.	4.3	-1.0	4.5	283.
1.0	155.	1740.	4.6	-1.3	4.8	285.
1.5	231.	1816.	4.4	-1.4	4.6	287.
2.0	307.	1892.	6.2	-2.3	6.6	291.
2.5	384.	1969.	8.0	-3.3	8.7	293.
3.0	460.	2045.	6.7	-3.0	7.4	294.
3.5	536.	2121.	5.0	-1.0	5.1	282.
4.0	612.	2197.	6.2	-2.9	6.9	295.
4.5	688.	2273.	9.0	-3.4	9.7	291.
5.0	765.	2350.	7.1	-4.0	8.2	300.
5.5	841.	2426.	4.9	-3.5	6.0	306.
6.0	917.	2502.	7.3	-4.8	8.7	303.
6.5	993.	2578.	1.0	-1.4	1.7	324.
7.0	1069.	2654.	1.0	-1.7	2.0	330.
7.5	1146.	2731.	2.6	-0.5	2.7	282.
8.0	1222.	2807.	3.4	-0.3	3.4	276.
8.5	1298.	2883.	5.7	-0.9	5.8	279.
9.0	1374.	2959.	4.5	-0.0	4.5	270.
9.5	1450.	3035.	0.4	0.4	0.5	221.
10.0	1527.	3112.	1.2	2.9	3.1	202.
10.5	1604.	3189.	2.1	2.2	3.1	224.
11.0	1682.	3267.	2.8	0.6	2.8	259.
11.5	1758.	3343.	0.9	2.3	2.5	202.
12.0	1847.	3432.	1.5	1.7	2.2	223.

UTAH UA UB

ELEV 1585 METERS

SOUNDING ID 5270

DATE 08/29/77 TIME 05 40MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.92		0.0		2.6	160
1.0	150	1735	11.18	2.26	3.55	6.48	1.9	139
2.0	300	1885	12.80	1.62	2.64	5.57	2.5	115
2.7	415.	2000.	12.98	0.36	-1.76	1.17	2.6	104
3.3	500	2085	12.55	-0.61	-1.59	1.34	2.4	105
6.0	915.	2500,	9.47	-2.71	-2.32	0.60	3.7	215
9.3	1415.	3000.	8.38	-1.46	-1.44	1.49	8.6	202
15.8	2415.	4000.	2.74	-5.64	-1.66	1.27		
22.4	3415.	5000.	-1.31	-4.05	-1.87	1.06		
28.8	4415.	6000.	-9.96	-8.66	-2.88	0.05		

UTAH UA UB

ELEV 1585 METERS

SOUNDING ID 5270

DATE 08/29/77 TIME 05 40MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.9	2.4	2.6	160.
0.5	76.	1661.	-1.5	4.2	4.5	160.
1.0	152.	1737.	-1.2	1.3	1.8	138.
1.5	229.	1814.	-0.4	0.5	0.6	146.
2.0	305.	1890.	-2.4	1.0	2.6	113.
2.5	381.	1966.	-2.5	0.8	2.7	107.
3.0	457.	2042.	-2.5	0.5	2.5	101.
3.5	533.	2118.	-2.3	0.7	2.4	108.
4.0	610.	2195.	-1.4	1.7	2.2	141.
4.5	686.	2271.	-0.6	2.7	2.8	168.
5.0	762.	2347.	0.0	2.3	2.3	181.
5.5	838.	2423.	1.0	2.6	2.8	201.
6.0	914.	2499.	2.1	3.0	3.7	215.
6.5	991.	2576.	2.7	3.0	4.1	222.
7.0	1067.	2652.	3.5	3.2	4.7	228.
7.5	1143.	2728.	5.1	4.7	6.9	227.
8.0	1219.	2804.	4.7	6.7	8.2	215.
8.5	1295.	2880.	3.4	7.3	8.1	205.
9.0	1372.	2957.	2.7	8.0	8.4	199.
9.5	1448.	3033.	3.6	8.0	8.7	204.
10.0	1524.	3109.	5.5	6.2	8.3	221.
10.5	1600.	3185.	7.1	5.3	8.9	233.
11.0	1676.	3261.	9.1	5.2	10.5	240.
11.5	1753.	3338.	7.0	5.4	8.8	232.
12.0	1829.	3414.	8.9	3.4	9.5	249.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5280

DATE 08/29/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WT DEC
	SFC		24.57		0.0		1.5	270
0.9	150	1735	22.25	-2.32	-1.89	1.03	2.0	272
1.8	300	1885	21.11	-1.14	-2.77	0.16	2.8	308
2.6	415.	2000.	19.32	-1.31	-2.62	0.31	3.7	284
3.1	500	2085	19.06	-0.73	-1.75	1.18	3.9	272
5.8	915.	2500.	17.00	-2.06	-1.06	1.87	3.8	241
9.1	1415.	3000.	14.29	-2.53	-1.43	1.50	8.3	248
15.5	2415.	4000.	9.79	-4.68	-3.47	-0.54		
21.1	3415.	5000.	4.26	-5.53	-1.86	1.06		
27.7	4415.	6000.	-1.76	-6.03	-2.66	0.27		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5280

DATE 08/29/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.5	0.0	1.5	270.
0.5	76.	1661.	1.2	0.6	1.4	243.
1.0	173.	1758.	2.1	-0.4	2.2	281.
1.5	249.	1834.	1.7	-1.3	2.1	306.
2.0	325.	1910.	2.4	-2.0	3.1	309.
2.5	403.	1988.	3.4	-1.0	3.6	286.
3.0	487.	2072.	4.1	-0.2	4.1	273.
3.5	563.	2148.	3.0	-0.0	3.0	270.
4.0	639.	2224.	3.2	-0.0	3.2	270.
4.5	716.	2301.	3.5	0.8	3.6	257.
5.0	792.	2377.	3.7	1.8	4.1	244.
5.5	868.	2453.	3.6	1.8	4.0	244.
6.0	944.	2529.	3.1	1.9	3.6	239.
6.5	1020.	2605.	3.0	1.7	3.4	240.
7.0	1097.	2682.	4.2	1.4	4.4	251.
7.5	1173.	2758.	3.7	0.9	3.8	257.
8.0	1249.	2834.	5.5	3.3	6.4	239.
8.5	1325.	2910.	8.7	4.2	9.7	244.
9.0	1401.	2986.	7.8	3.1	8.4	248.
9.5	1478.	3063.	6.7	3.3	7.4	244.
10.0	1554.	3139.	7.0	4.3	8.2	238.
10.5	1630.	3215.	5.5	7.2	9.0	217.
11.0	1706.	3291.	2.9	10.6	11.0	195.
11.5	1782.	3367.	1.8	10.0	10.1	190.
12.0	1859.	3444.	1.7	10.2	10.3	190.

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5273

DATE 08/31/77 TIME 05 42MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		11.17		0,0		2.1	90
1.0	150	1735	13.29	2.11	-0.18	2.75	3.4	87
2.0	300	1885	12.74	-0.55	-0.72	2.21	7.6	95
2.7	415.	2000.	12.37	-0.28	-0.72	2.21	6.6	103
3.3	500	2085	12.19	-0.27	-1.08	1.84	3.8	113
6.0	915.	2500.	11.17	-1.02	0,0	2.93	3.7	136
9.3	1415.	3000.	9.60	-1.57	-1.83	1.10	6.5	164
15.8	2415.	4000.	3.03	-6.58	-2.06	0.87		
22.4	3415.	5000.	-2.05	-5.08	-2.47	0.46		
28.3	4415.	6000.	-11.35	-9.30	-1.95	0.98		

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5273

DATE 08/31/77 TIME 05 42MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0,	1585,	-2.1	-0,0	2.1	90,
0.5	76,	1661,	-1.4	1.2	1.8	132,
1.0	152,	1737,	-3.5	-0.3	3.5	85,
1.5	229,	1814,	-5.0	-0.1	5.0	89,
2.0	305,	1890,	-7.7	0.7	7.8	95,
2.5	381,	1966,	-7.8	1.0	7.9	97,
3.0	457,	2042,	-4.7	1.6	4.9	109,
3.5	533,	2118,	-2.7	1.3	3.0	116,
4.0	610,	2195,	-2.1	1.9	2.9	132,
4.5	686,	2271,	-1.7	2.5	3.1	146,
5.0	762,	2347,	-0.3	1.6	1.6	167,
5.5	838,	2423,	-1.3	1.9	2.3	145,
6.0	914,	2499,	-2.6	2.7	3.7	136,
6.5	991,	2576,	-1.3	2.8	3.1	155,
7.0	1067,	2652,	0.6	3.0	3.0	192,
7.5	1143,	2728,	-0.8	4.5	4.6	170,
8.0	1219,	2804,	-1.7	5.1	5.4	161,
8.5	1295,	2880,	-2.2	5.1	5.6	156,
9.0	1372,	2957,	-2.7	5.4	6.0	153,
9.5	1448,	3033,	-1.0	6.8	6.8	171,
10.0	1524,	3109,	3.4	7.0	7.8	206,
10.5	1600,	3185,	8.8	-2.4	9.1	285,
11.0	1676,	3261,	10.6	-1.1	10.6	276,
11.5	1753,	3338,	11.0	0.7	11.1	266,
12.0	1829,	3414,	10.5	1.5	10.6	262,

UTAH UAUB

ELEV 1585 METERS

SOUNDING ID 5271

DATE 08/31/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		24.57		0.0		2.1	180
0.8	150	1735	22.05	-2.52	-2.41	0.52	1.1	108
1.7	300	1885	21.53	-0.53	-1.04	1.89	2.3	27
2.5	415.	2000.	21.09	-0.44	-1.56	1.37	0.7	121
3.0	500	2085	20.48	-0.61	-2.61	0.32	0.6	317
5.7	915.	2500.	16.91	-3.39	-1.24	1.69	2.1	317
9.0	1415.	3000.	15.74	-1.35	-2.66	0.26	7.4	209
15.5	2415.	4000.	10.25	-5.48	-1.27	1.65		
22.1	3415.	5000.	3.98	-6.27	-2.24	0.69		
28.0	4415.	6000.	-4.96	-8.94	-3.26	-0.33		

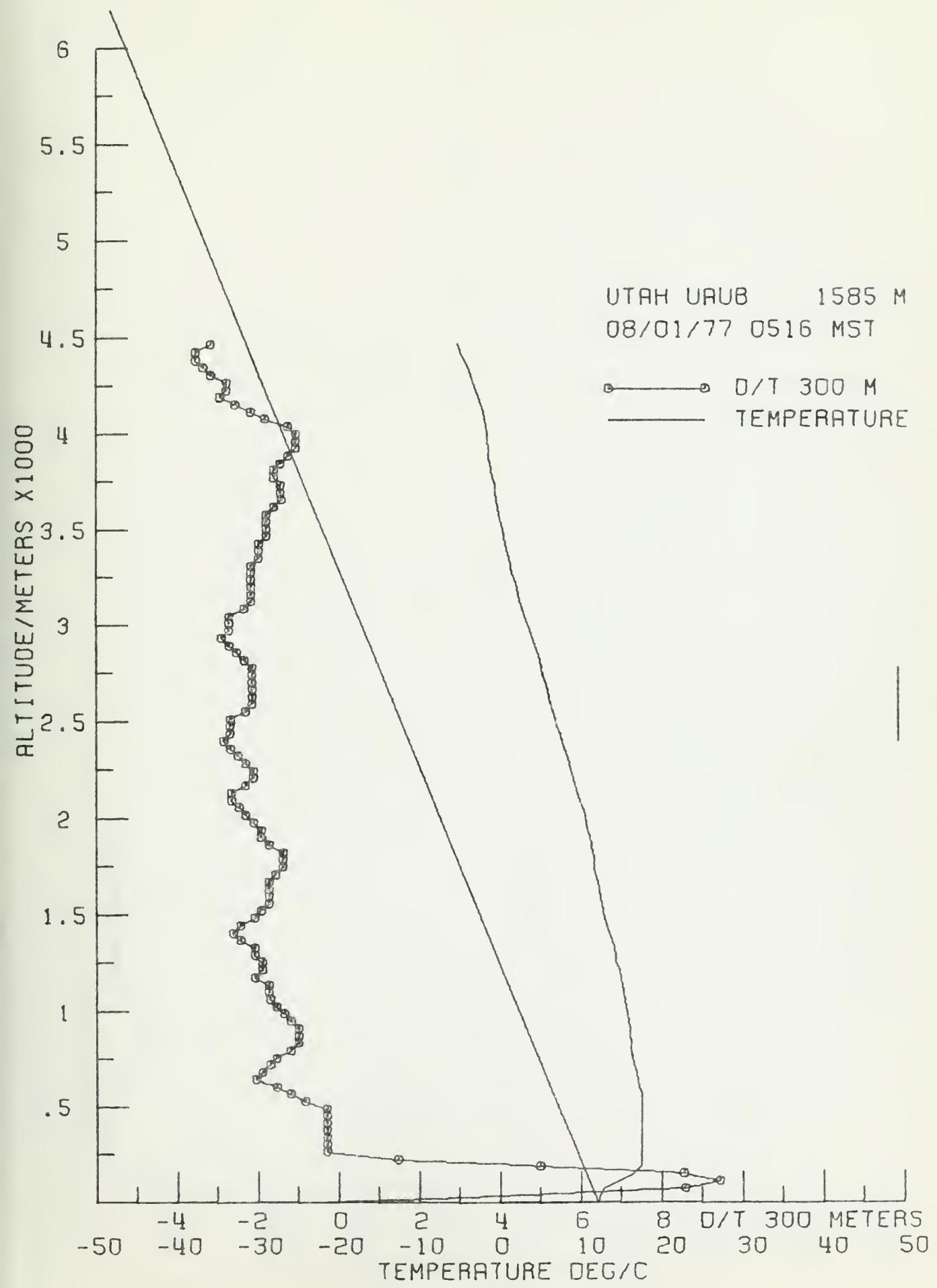
UTAH UAUB

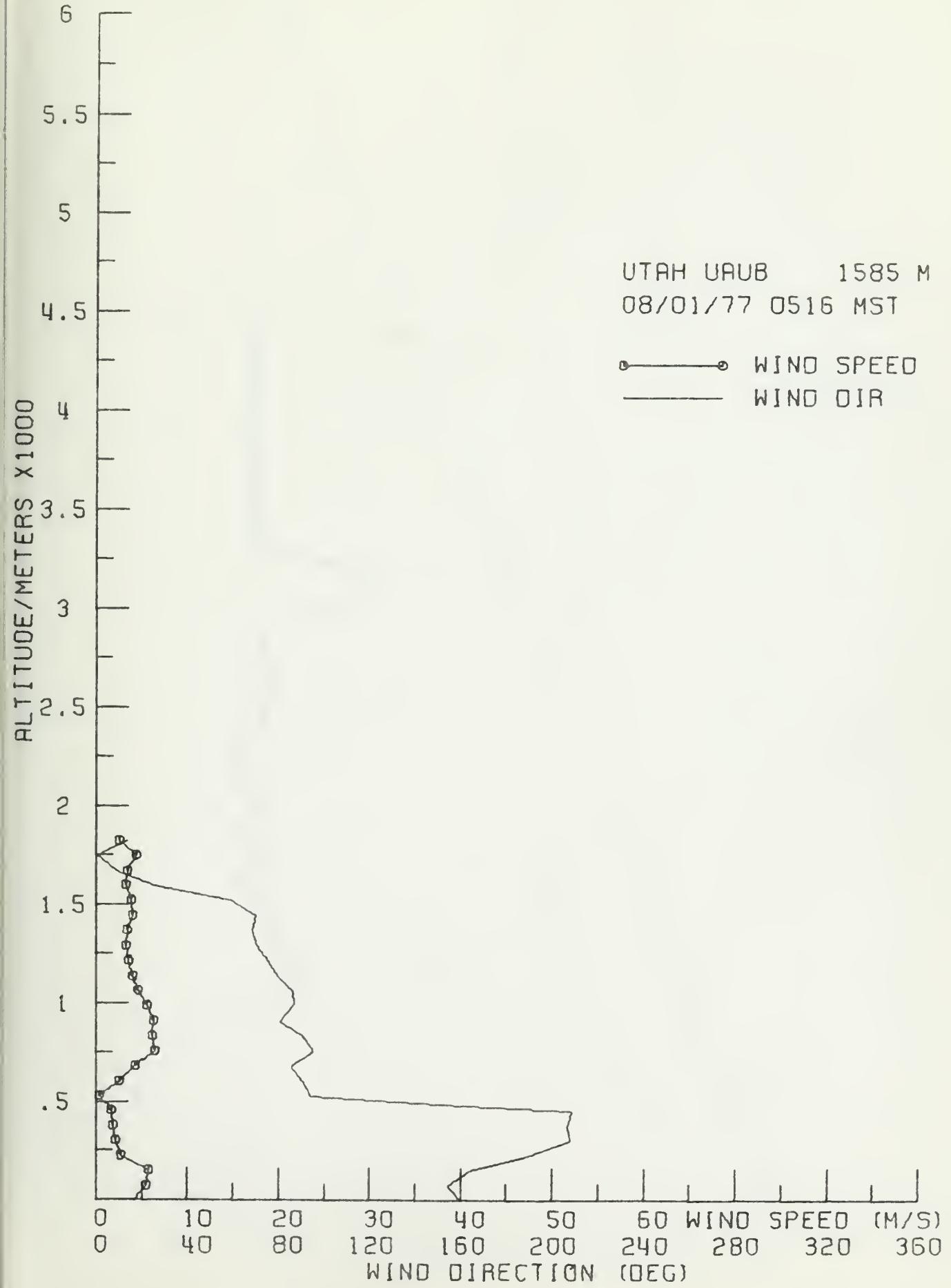
ELEV 1585 METERS

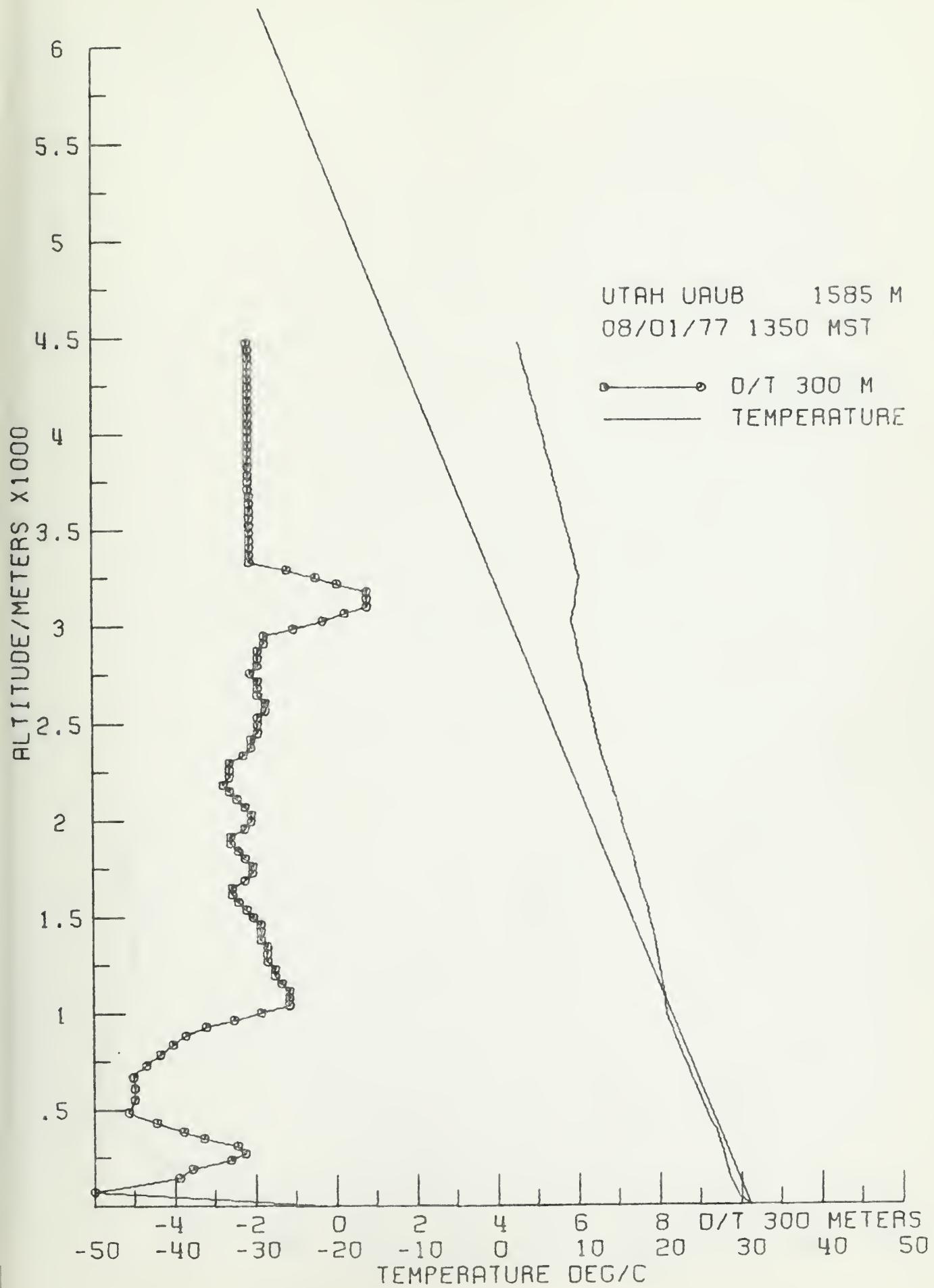
SOUNDING ID 5271

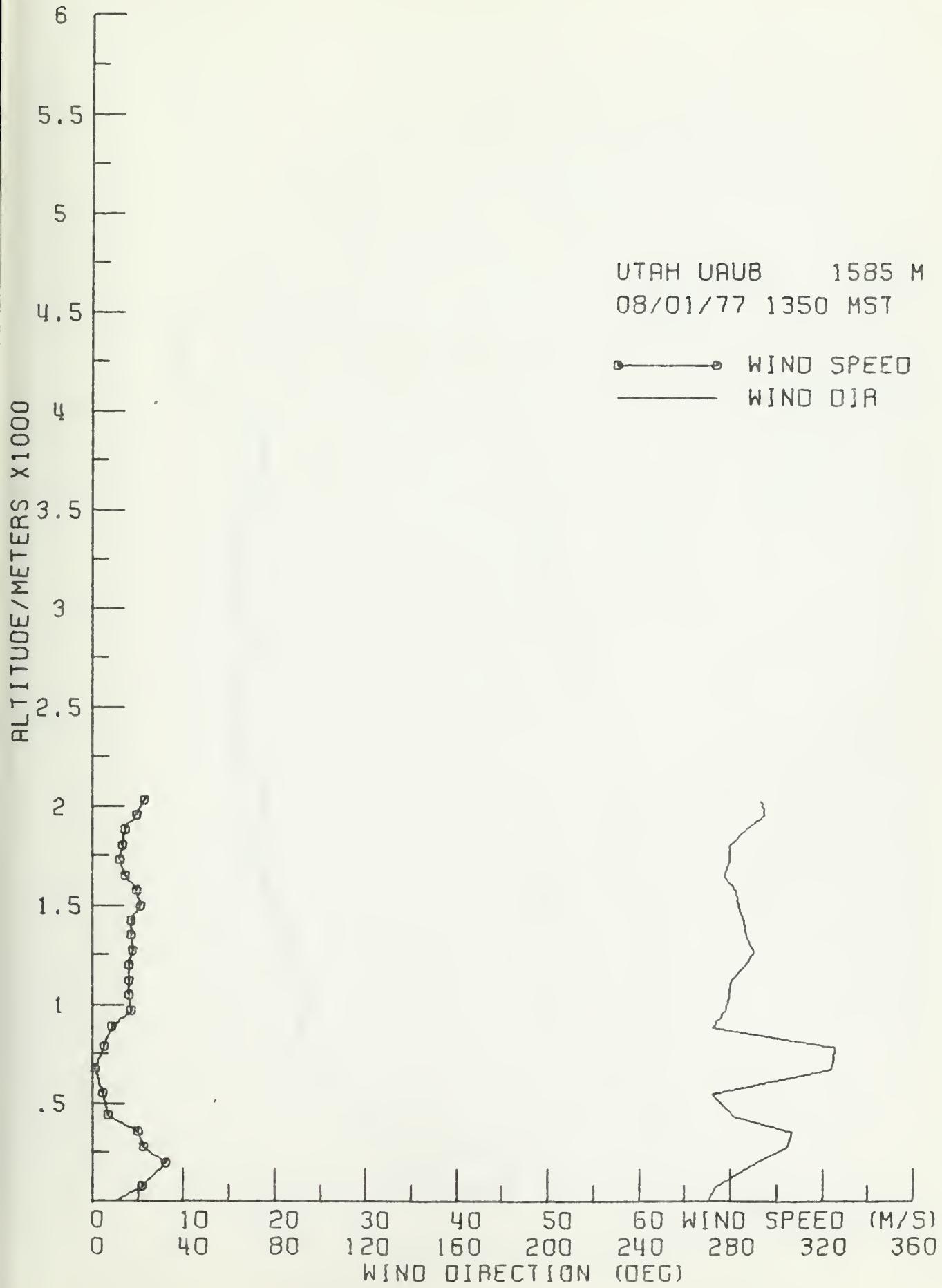
DATE 08/31/77 TIME 13 50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

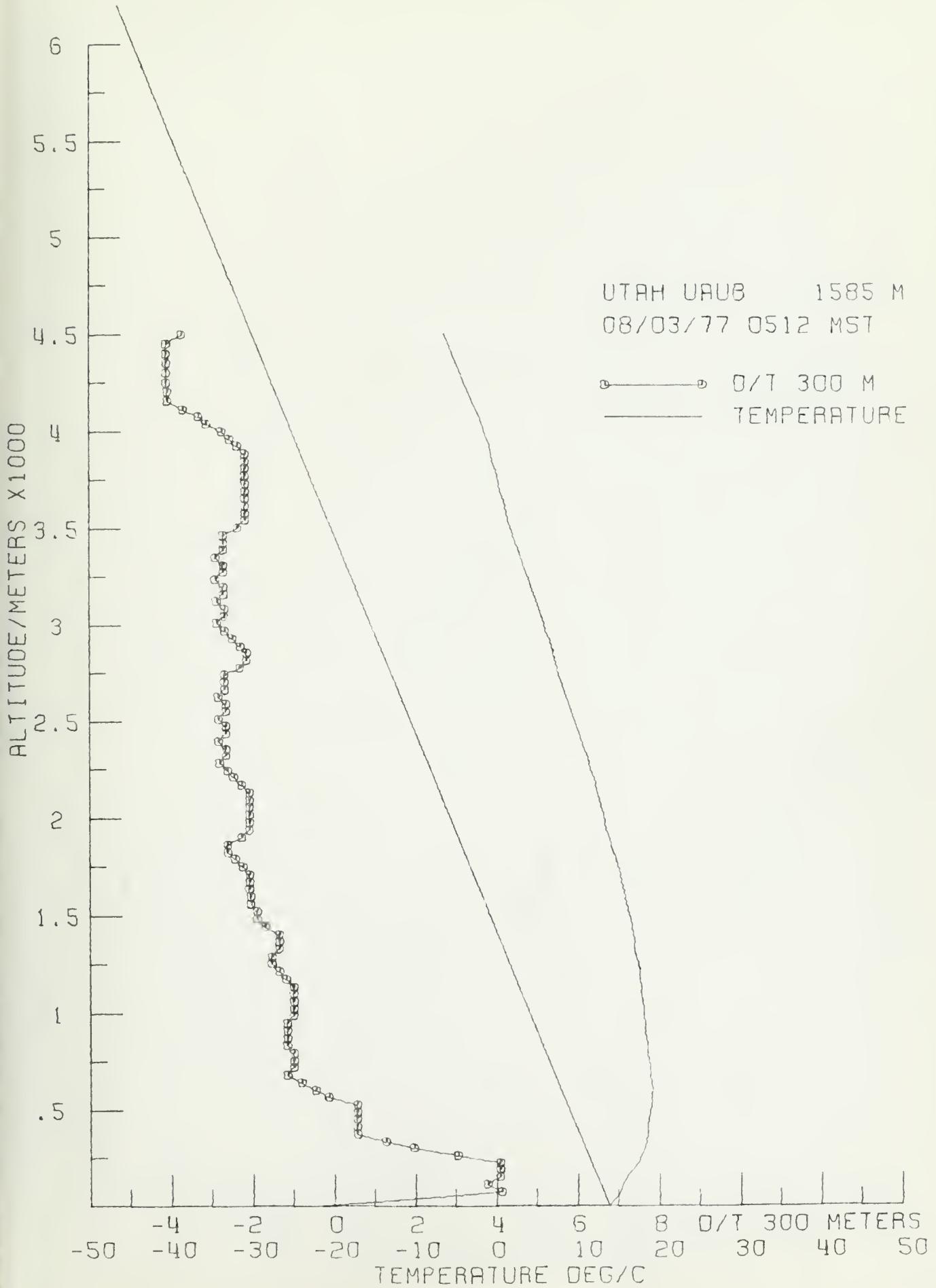
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	2.1	2.1	180.
0.5	76.	1661.	0.6	0.8	1.0	217.
1.0	189.	1774.	-1.0	-0.8	1.2	50.
1.5	265.	1850.	-0.5	-2.1	2.2	14.
2.0	342.	1927.	-1.7	-1.8	2.4	43.
2.5	418.	2003.	-0.5	0.4	0.6	124.
3.0	494.	2079.	0.4	-0.4	0.6	315.
3.5	570.	2155.	0.2	-0.7	0.7	342.
4.0	648.	2233.	0.8	-0.7	1.0	311.
4.5	735.	2320.	2.9	-2.5	3.8	311.
5.0	811.	2396.	1.2	-2.9	3.2	338.
5.5	887.	2472.	0.8	-2.0	2.2	338.
6.0	963.	2548.	2.0	-0.3	2.0	280.
6.5	1040.	2625.	2.7	1.9	3.3	235.
7.0	1116.	2701.	3.2	4.5	5.5	215.
7.5	1192.	2777.	3.4	5.1	6.1	213.
8.0	1268.	2853.	3.8	5.5	6.7	215.
8.5	1344.	2929.	3.5	6.2	7.1	209.
9.0	1421.	3006.	3.6	6.5	7.4	209.
9.5	1497.	3082.	3.4	6.1	7.0	209.
10.0	1573.	3158.	2.7	5.9	6.5	205.
10.5	1649.	3234.	2.0	5.5	5.9	200.
11.0	1725.	3310.	2.0	5.5	5.9	200.
11.5	1802.	3387.	0.8	4.8	4.9	190.
12.0	1878.	3463.	3.0	4.1	5.1	216.

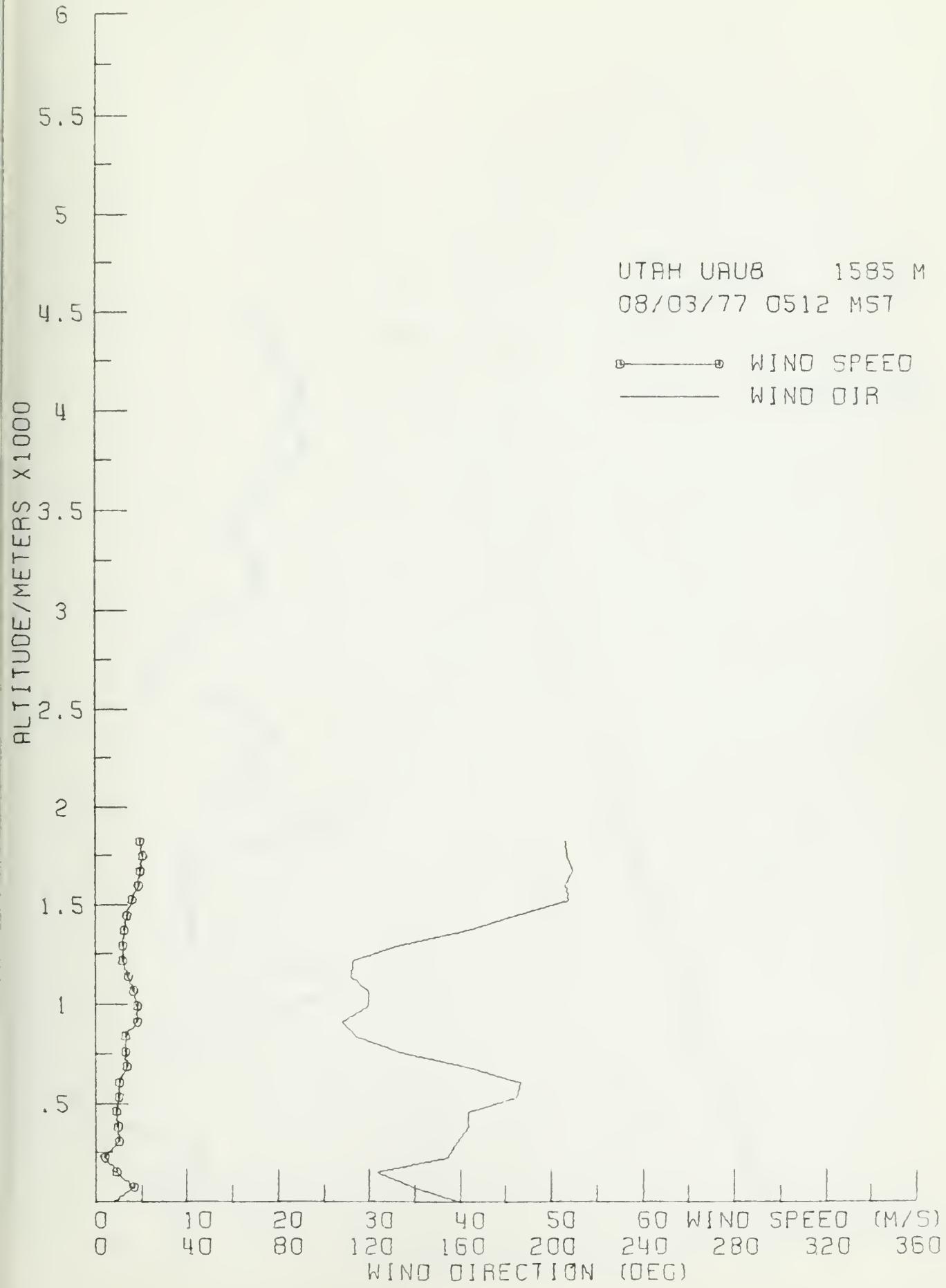


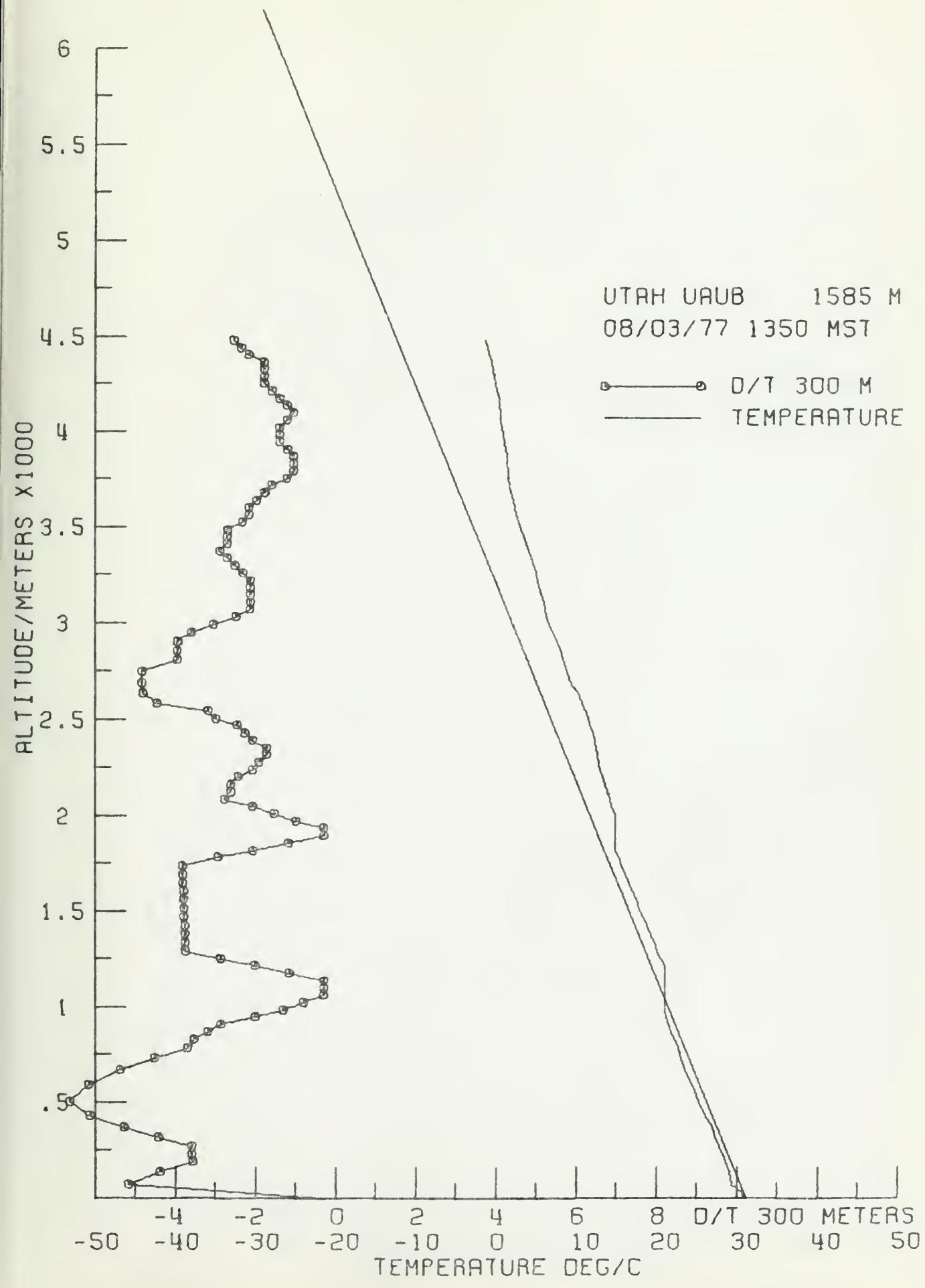


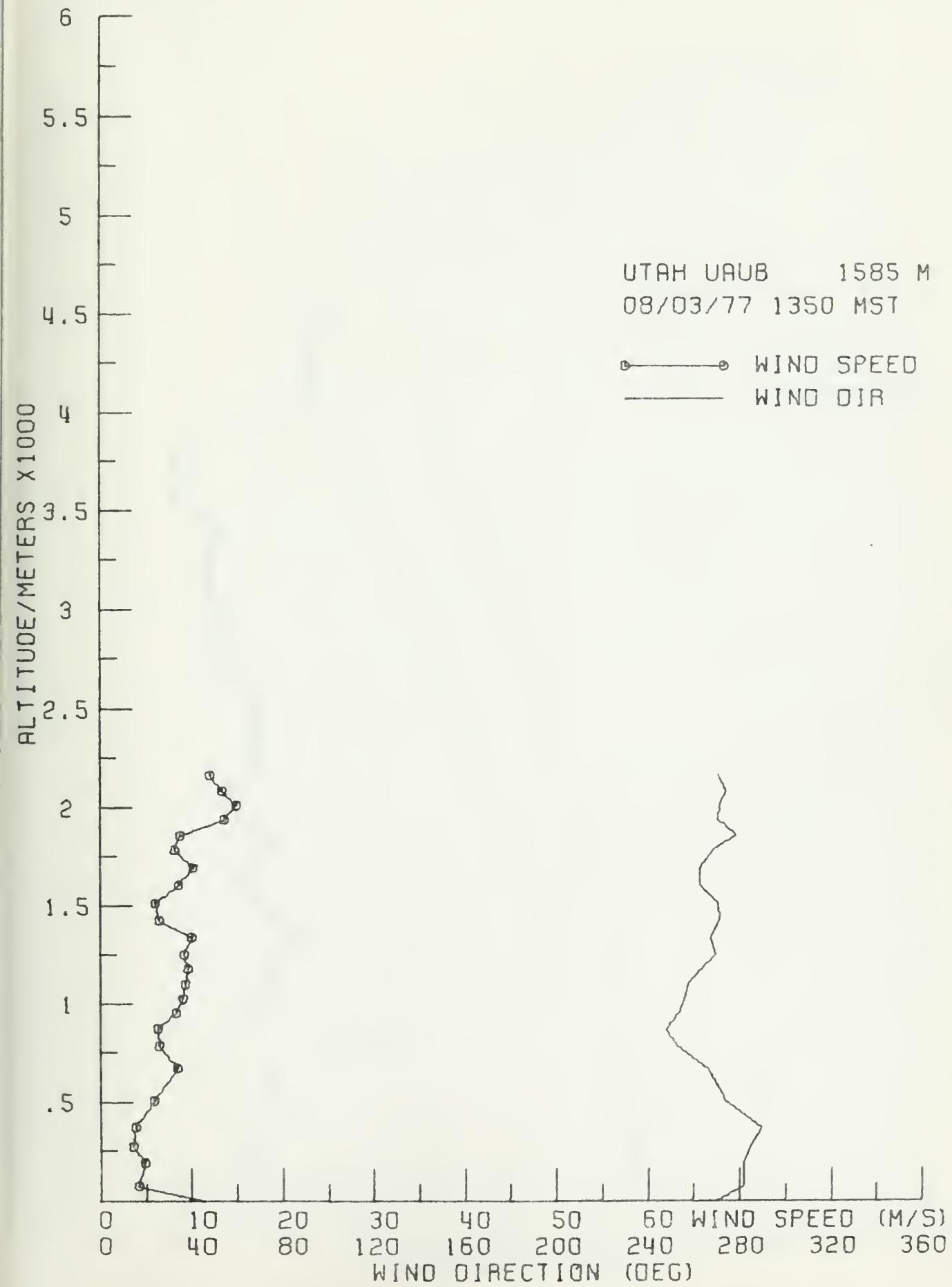


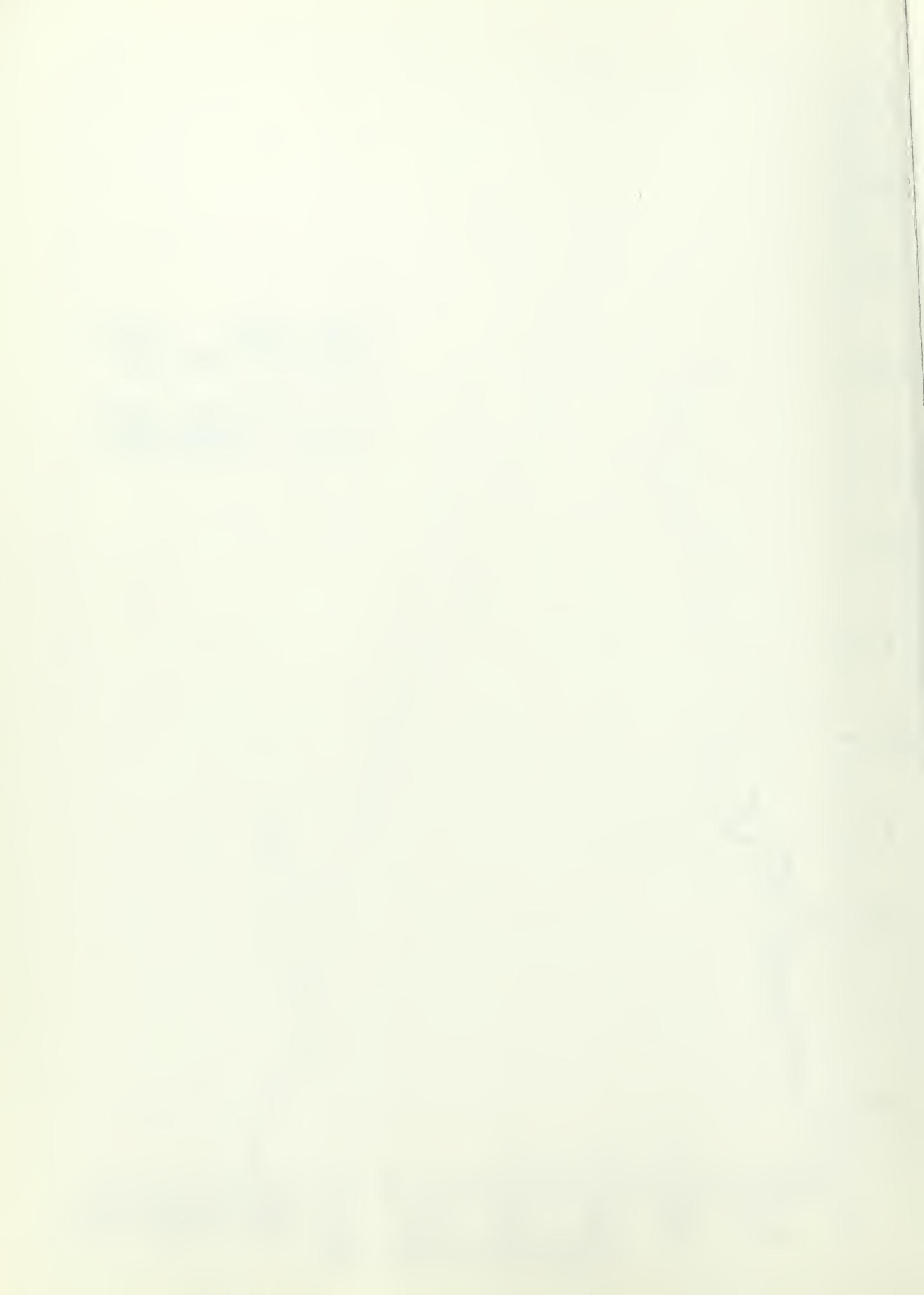




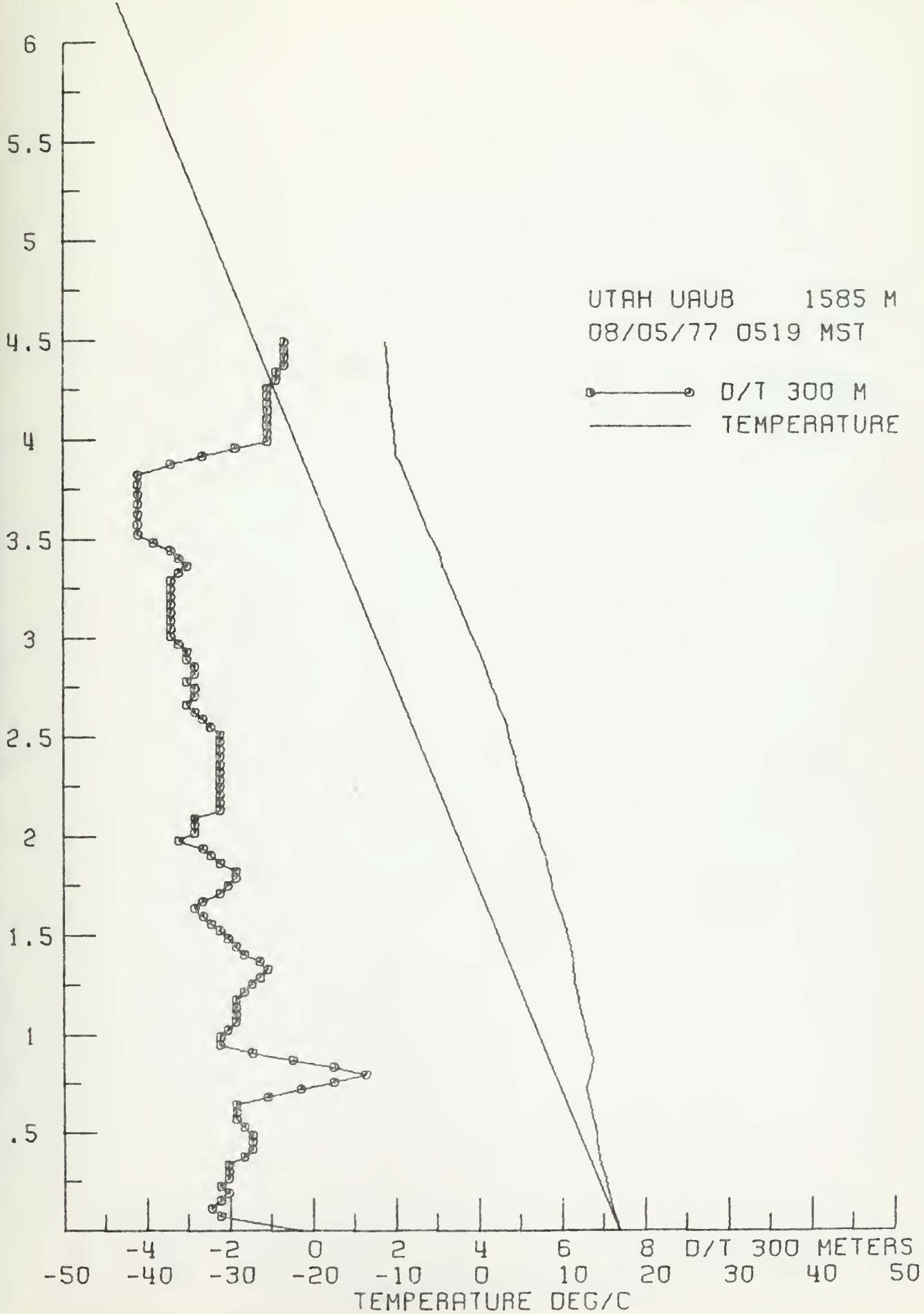


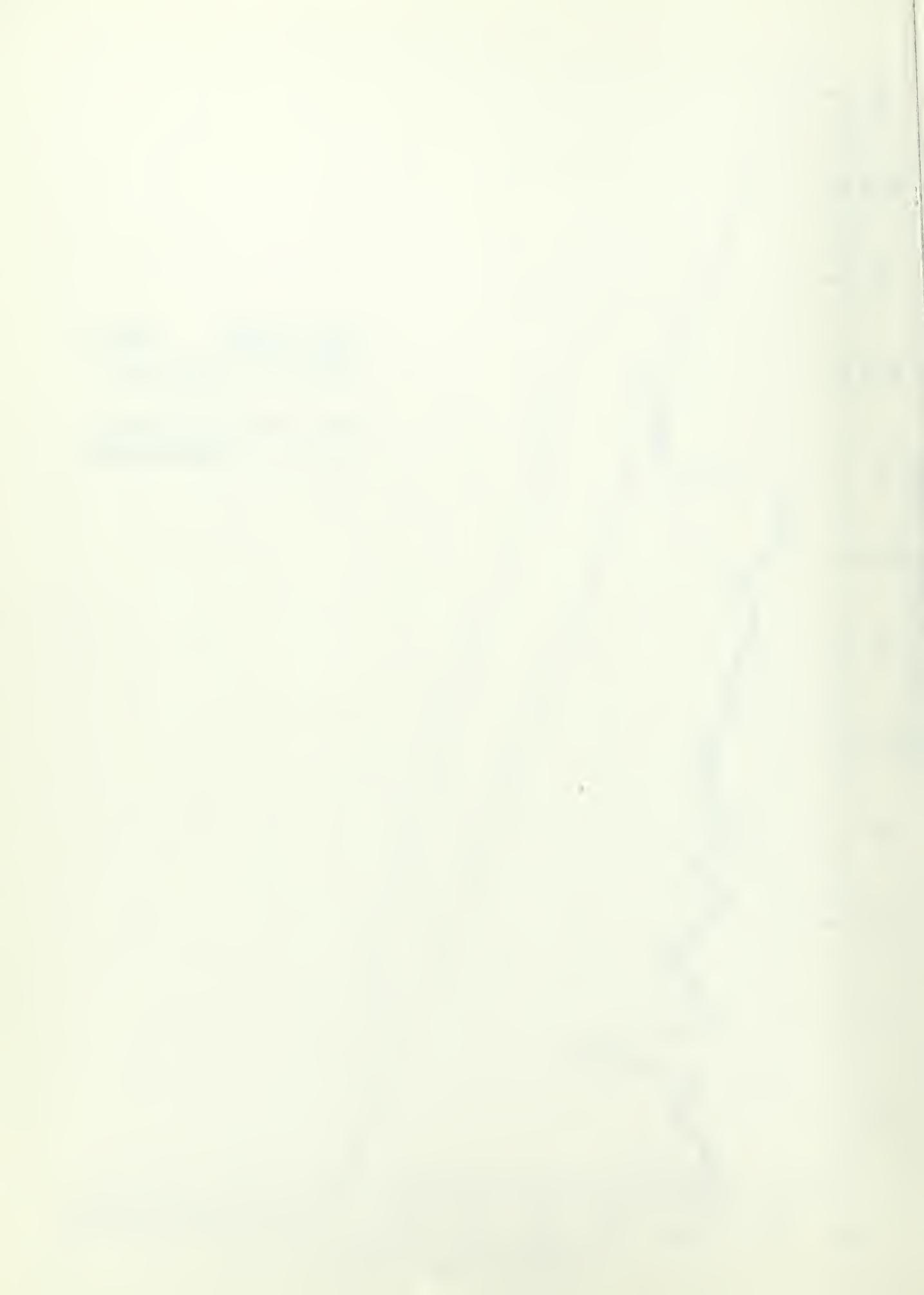


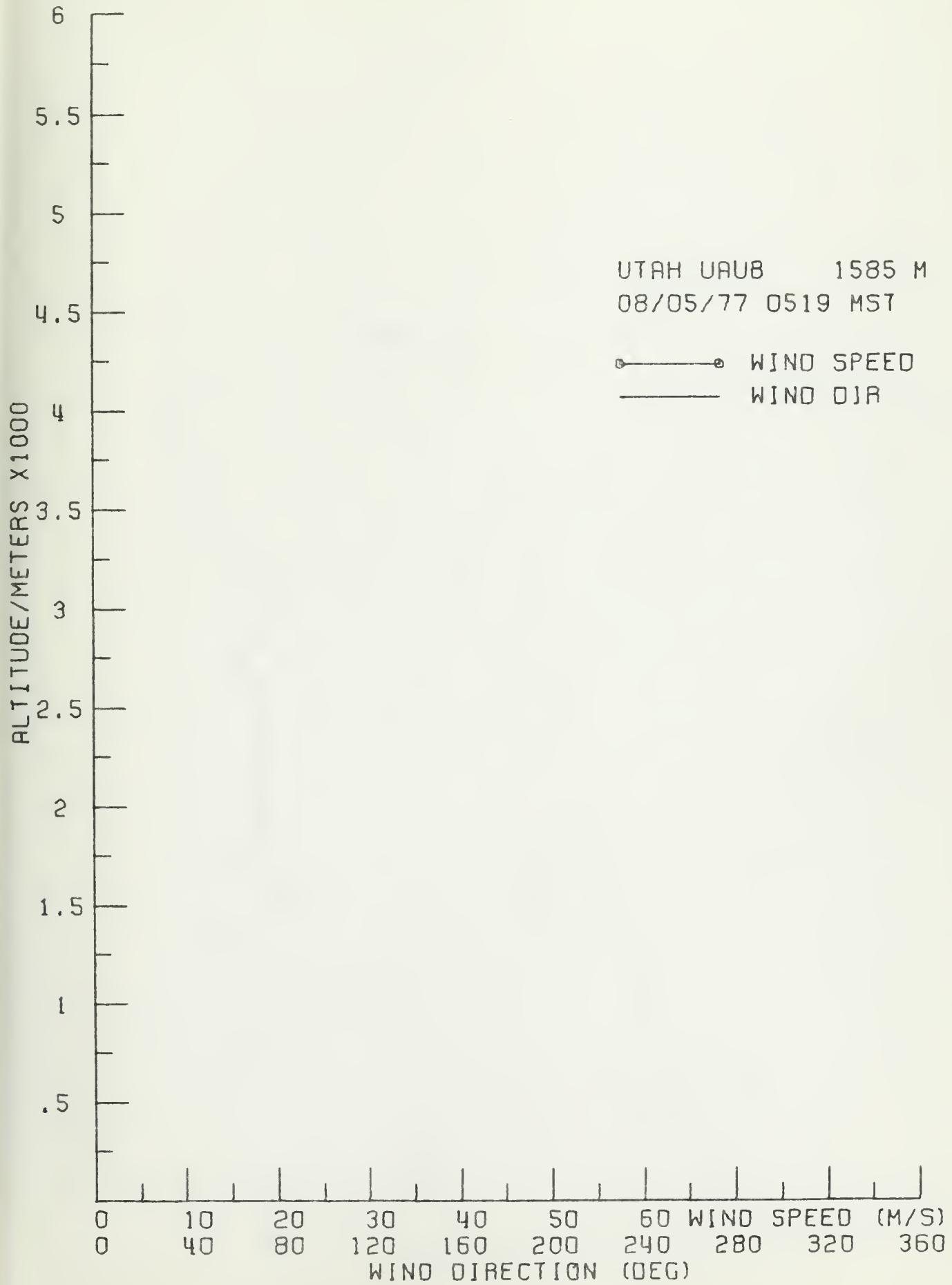


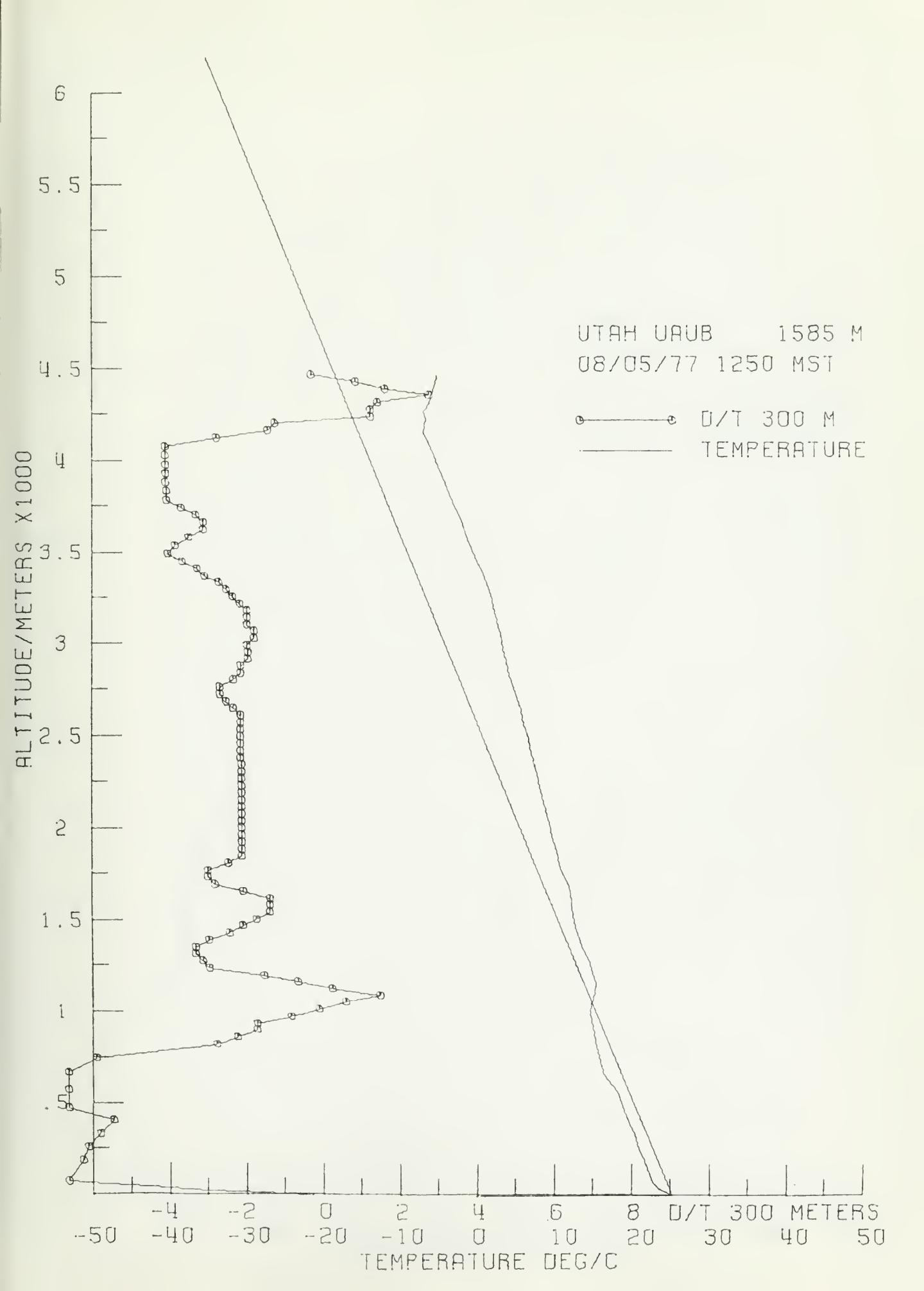


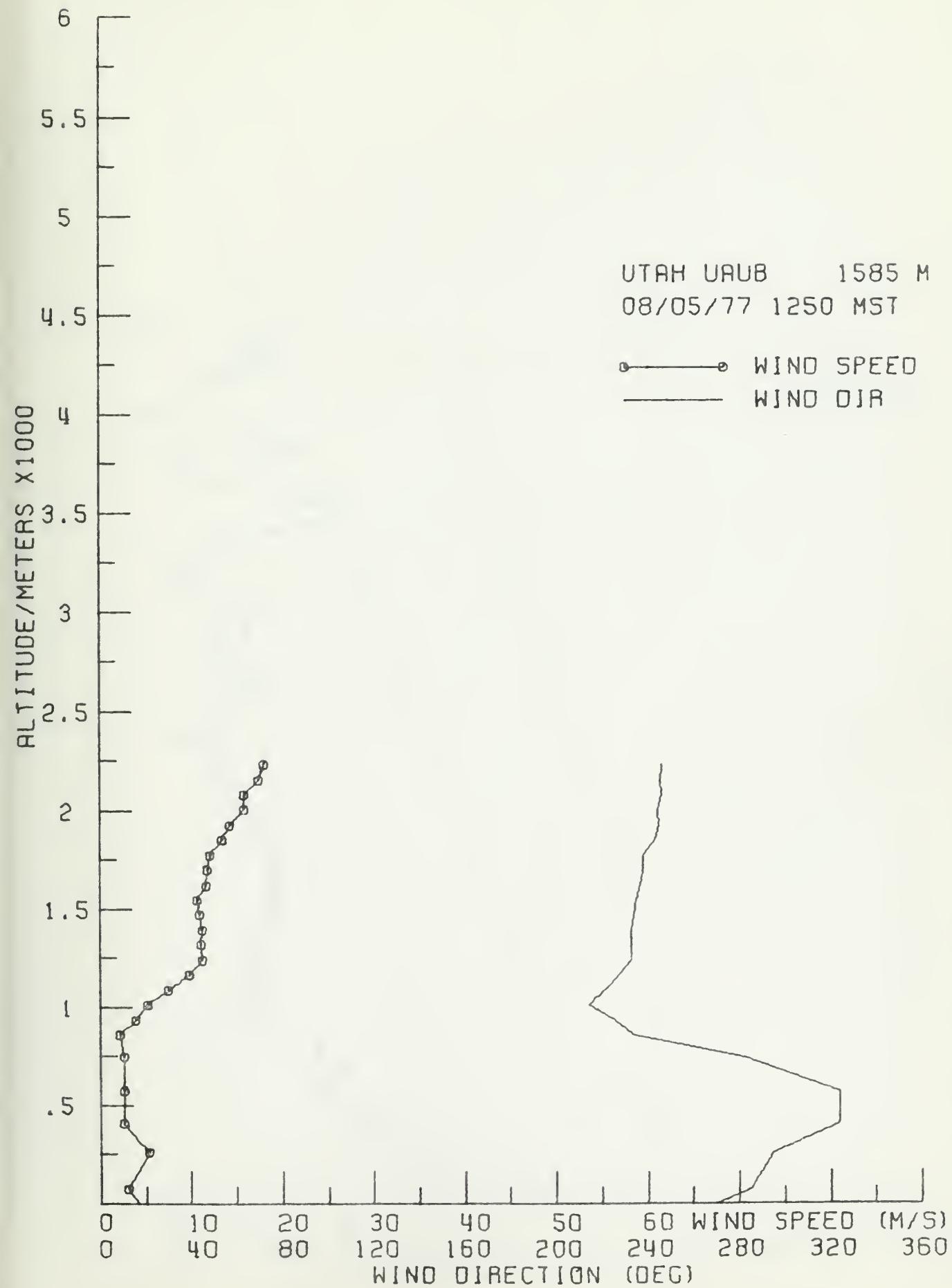
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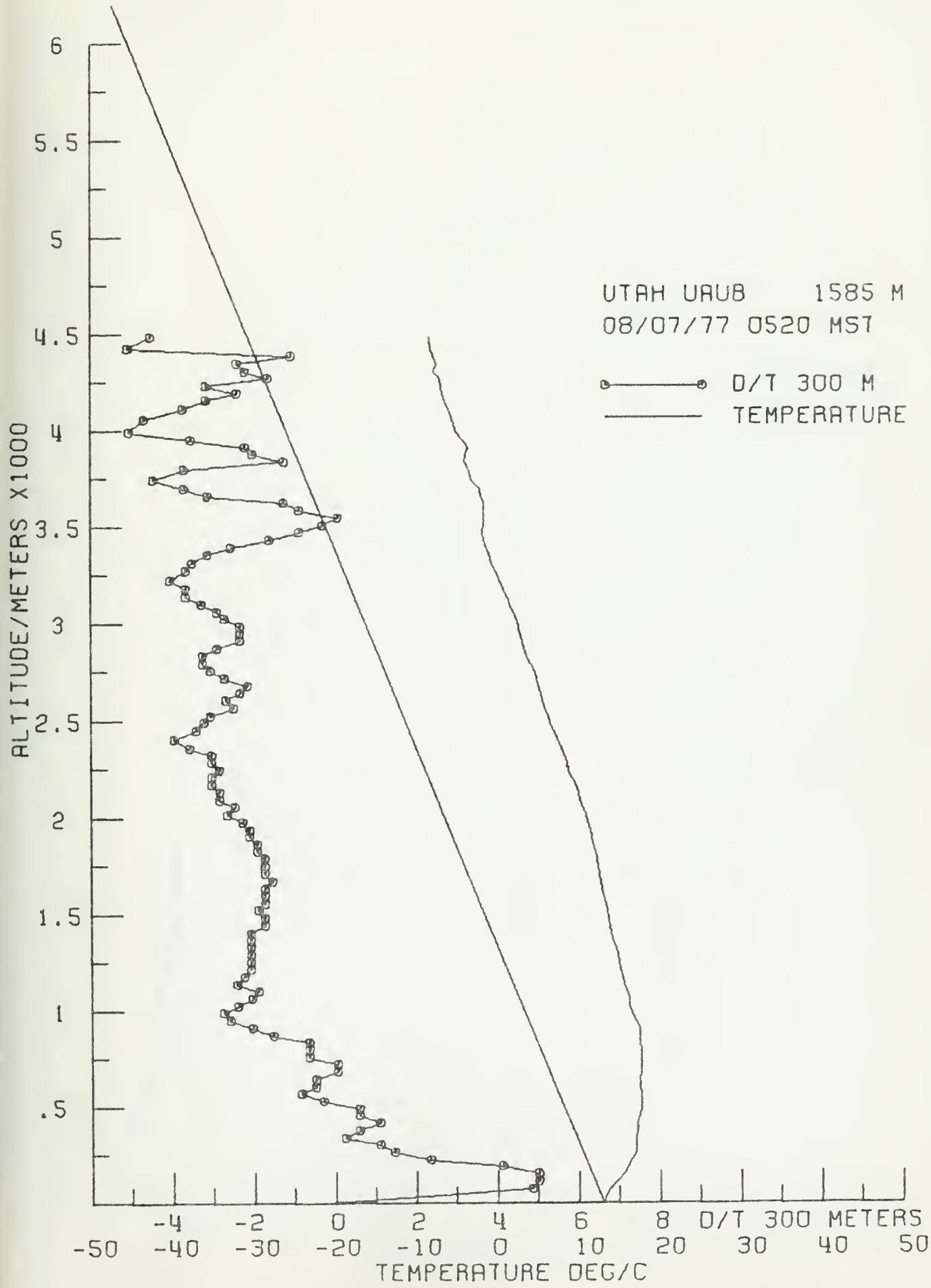


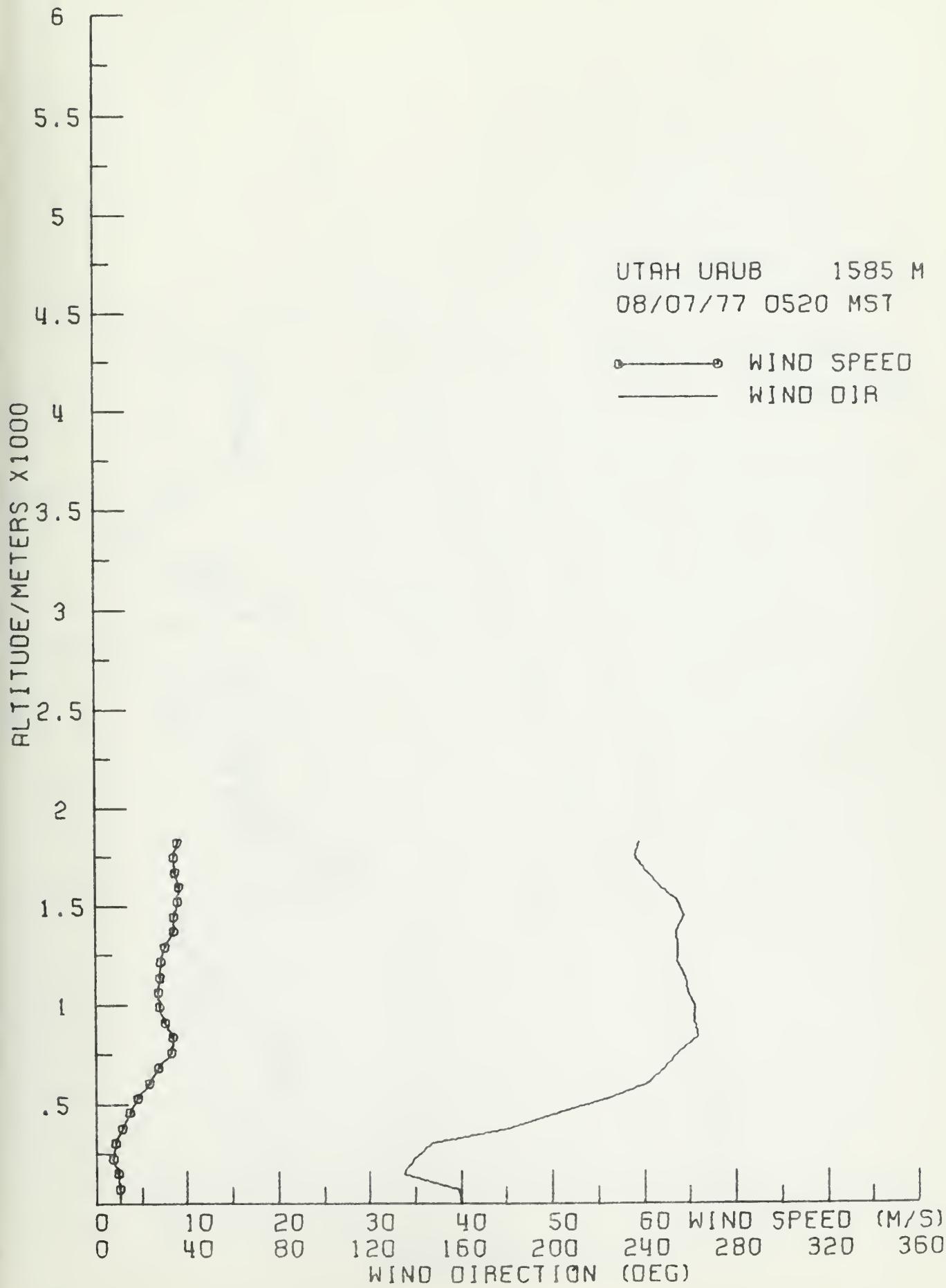


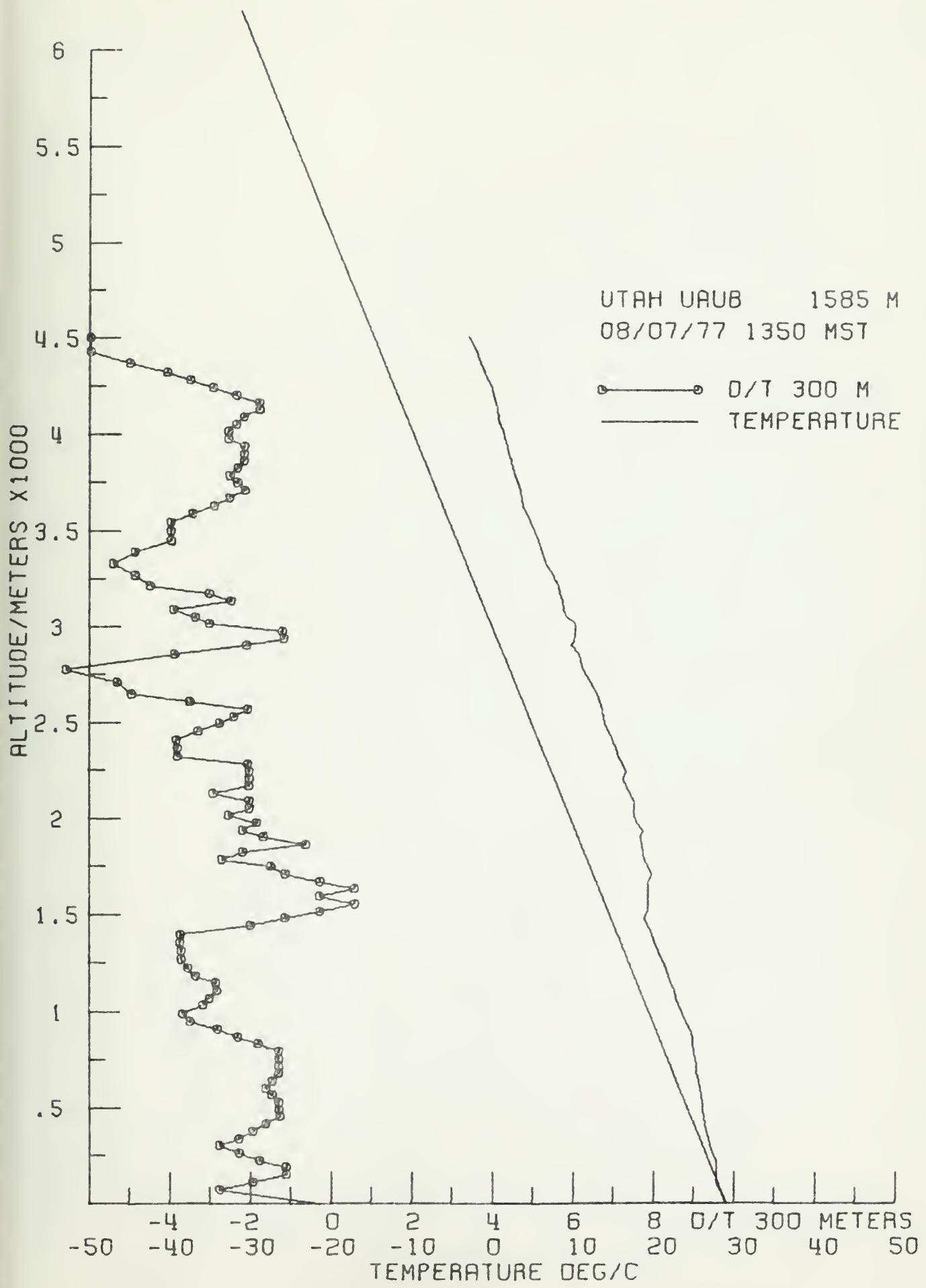


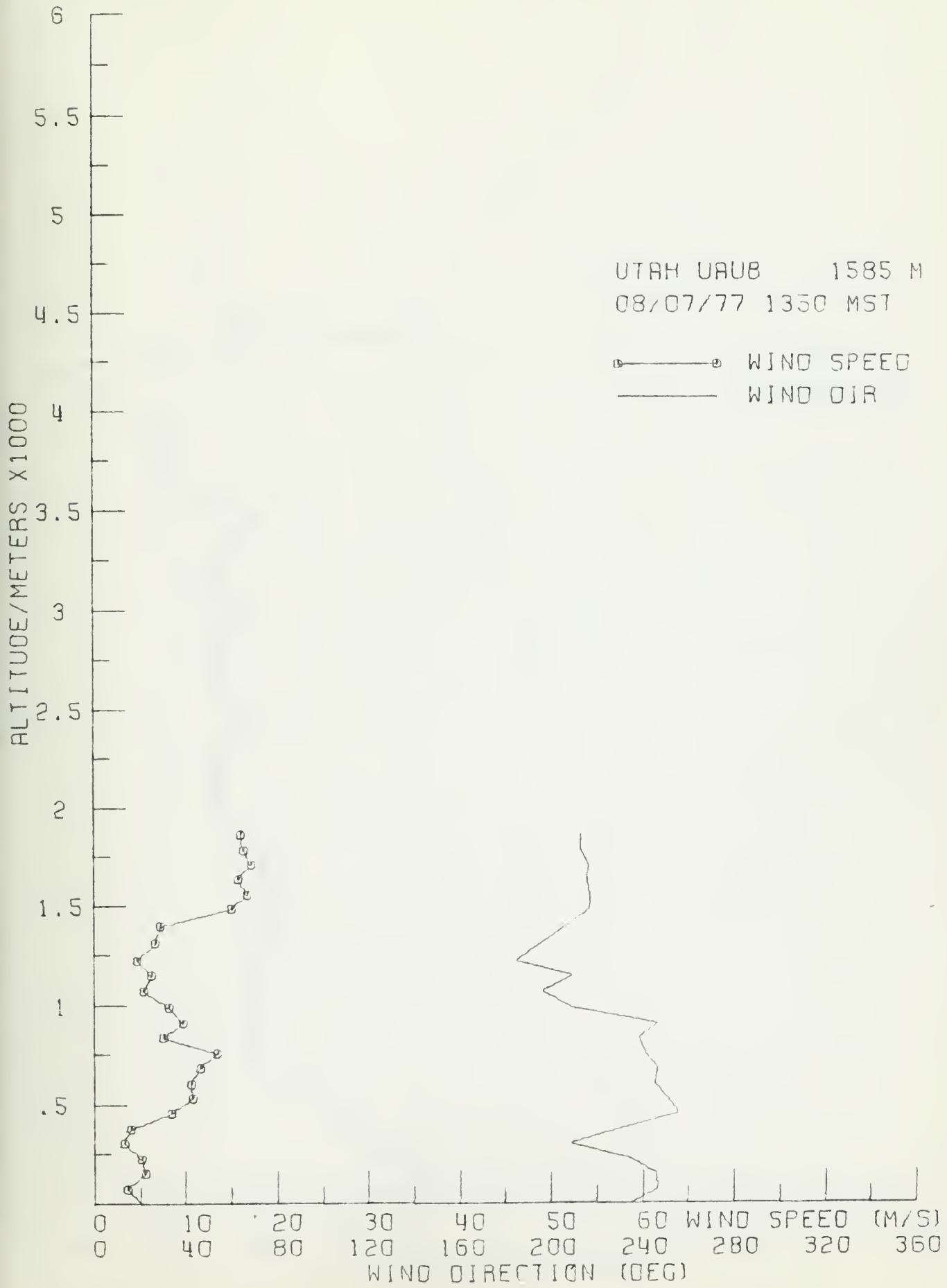




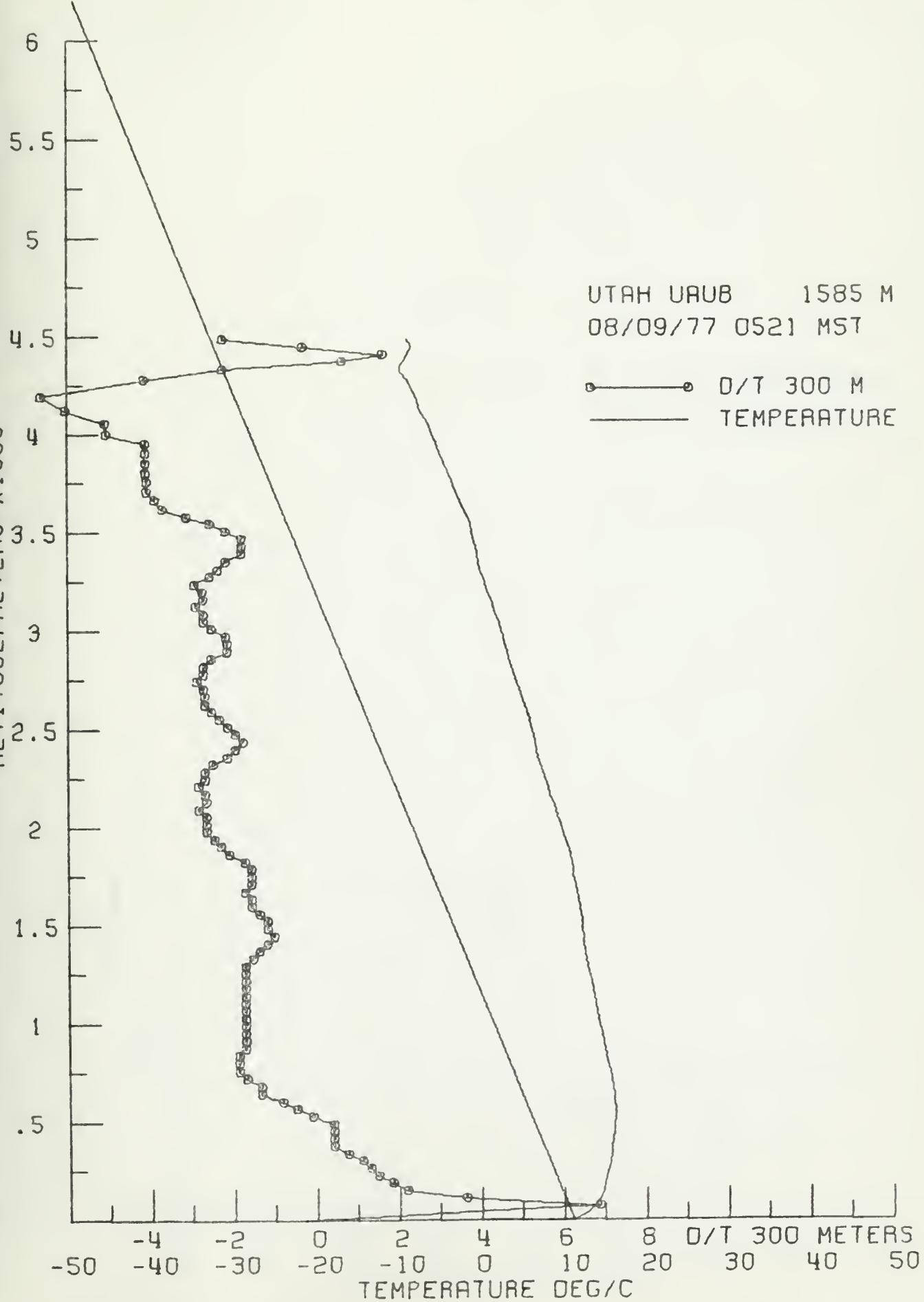


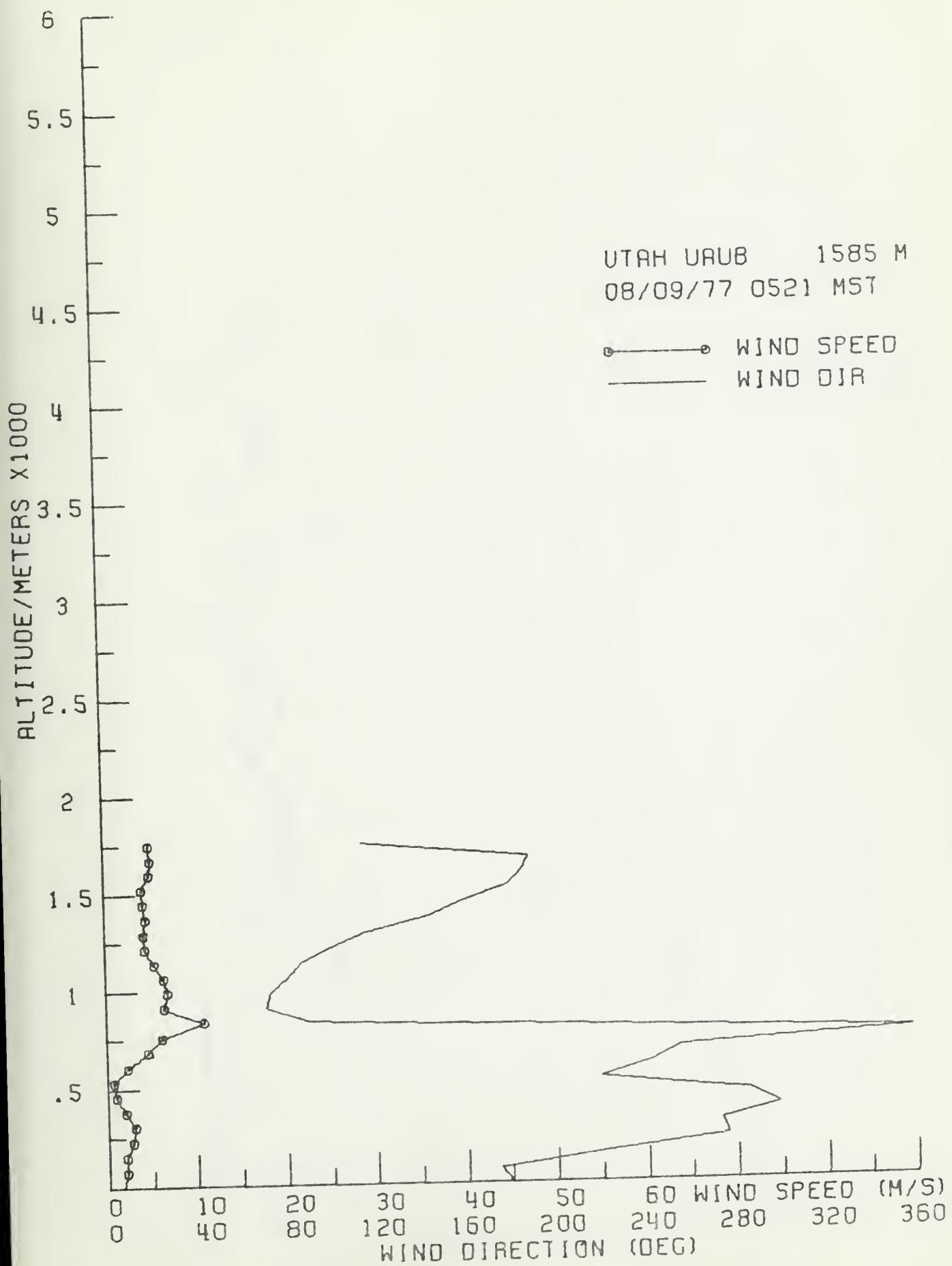




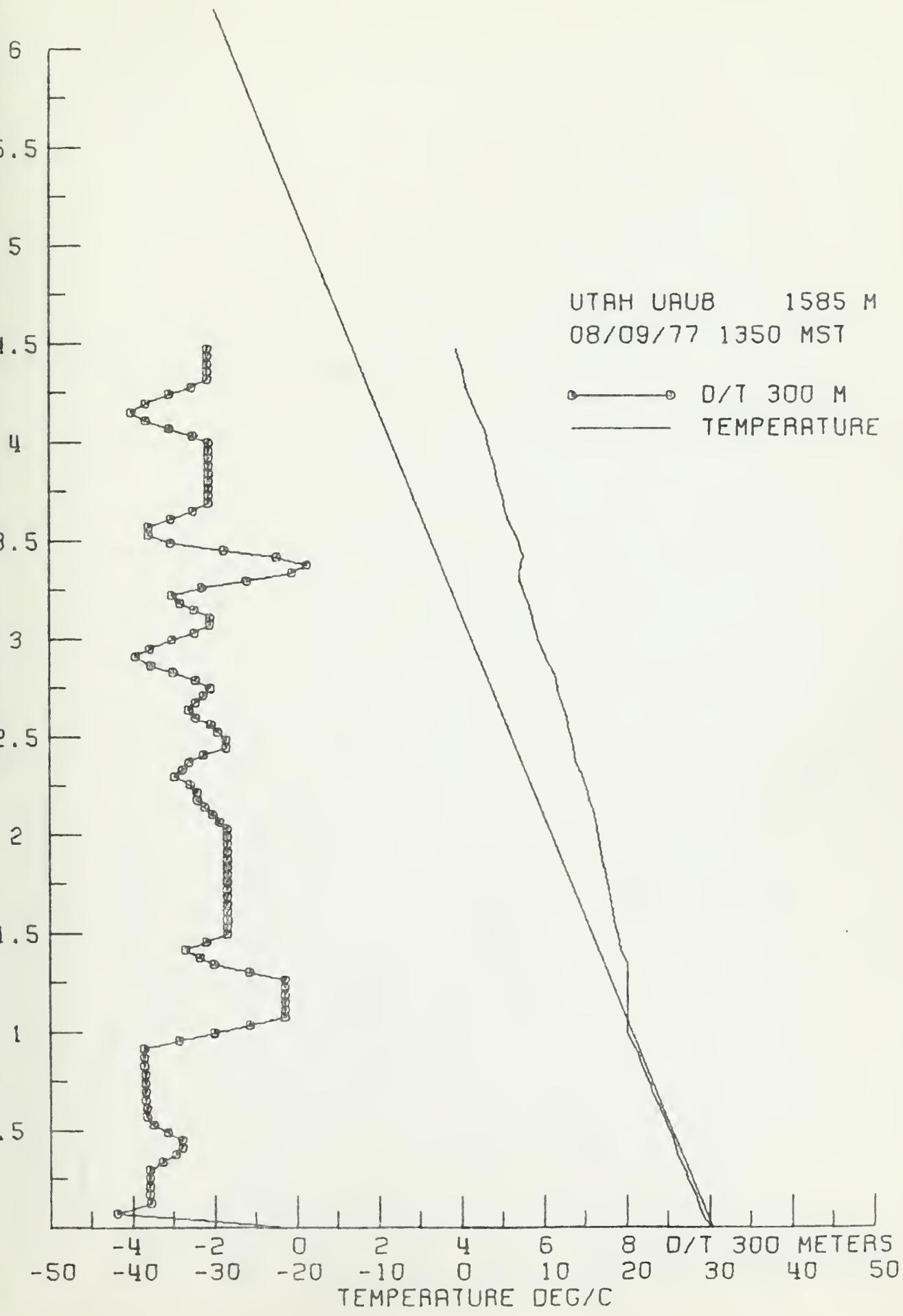


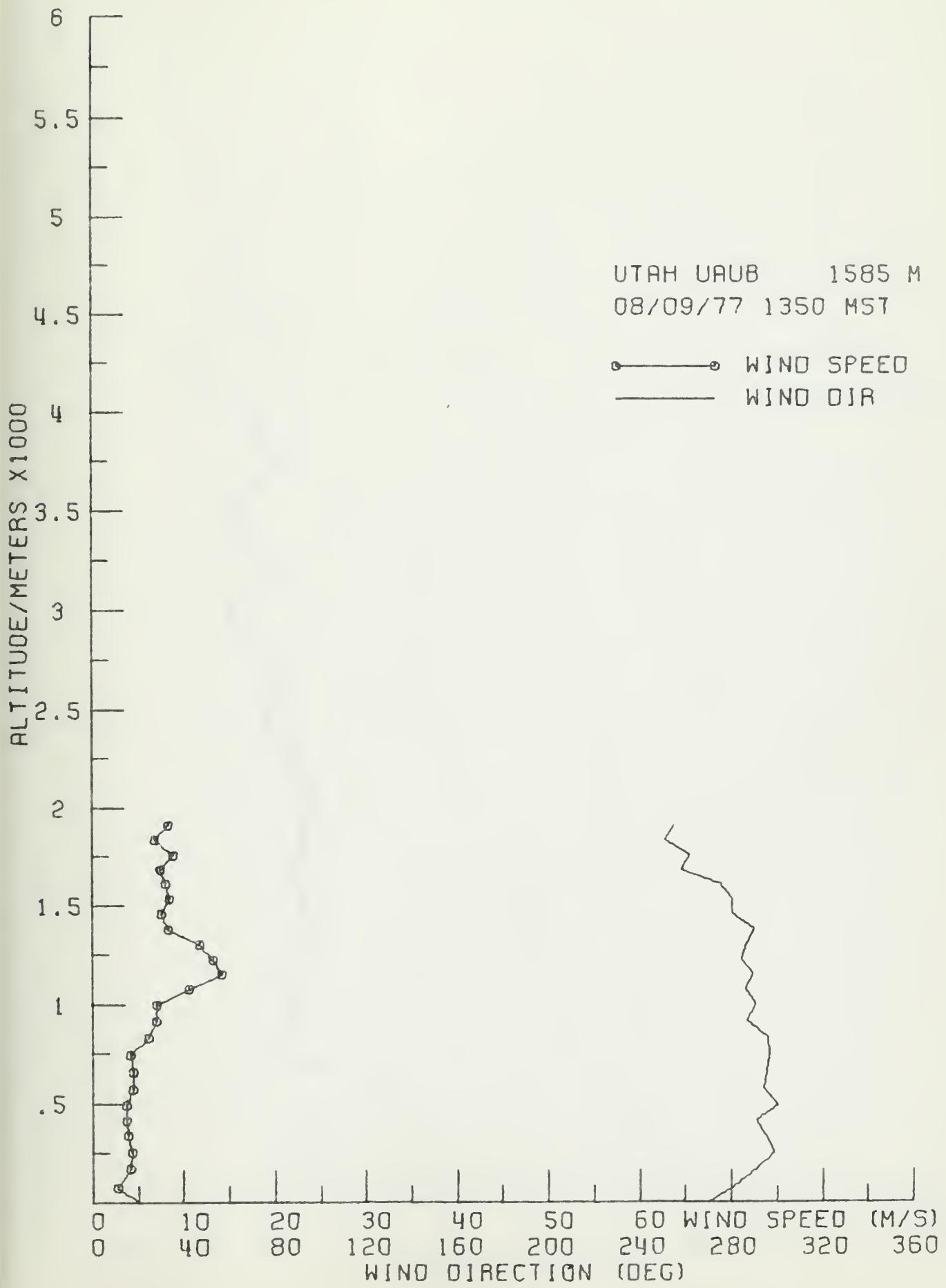
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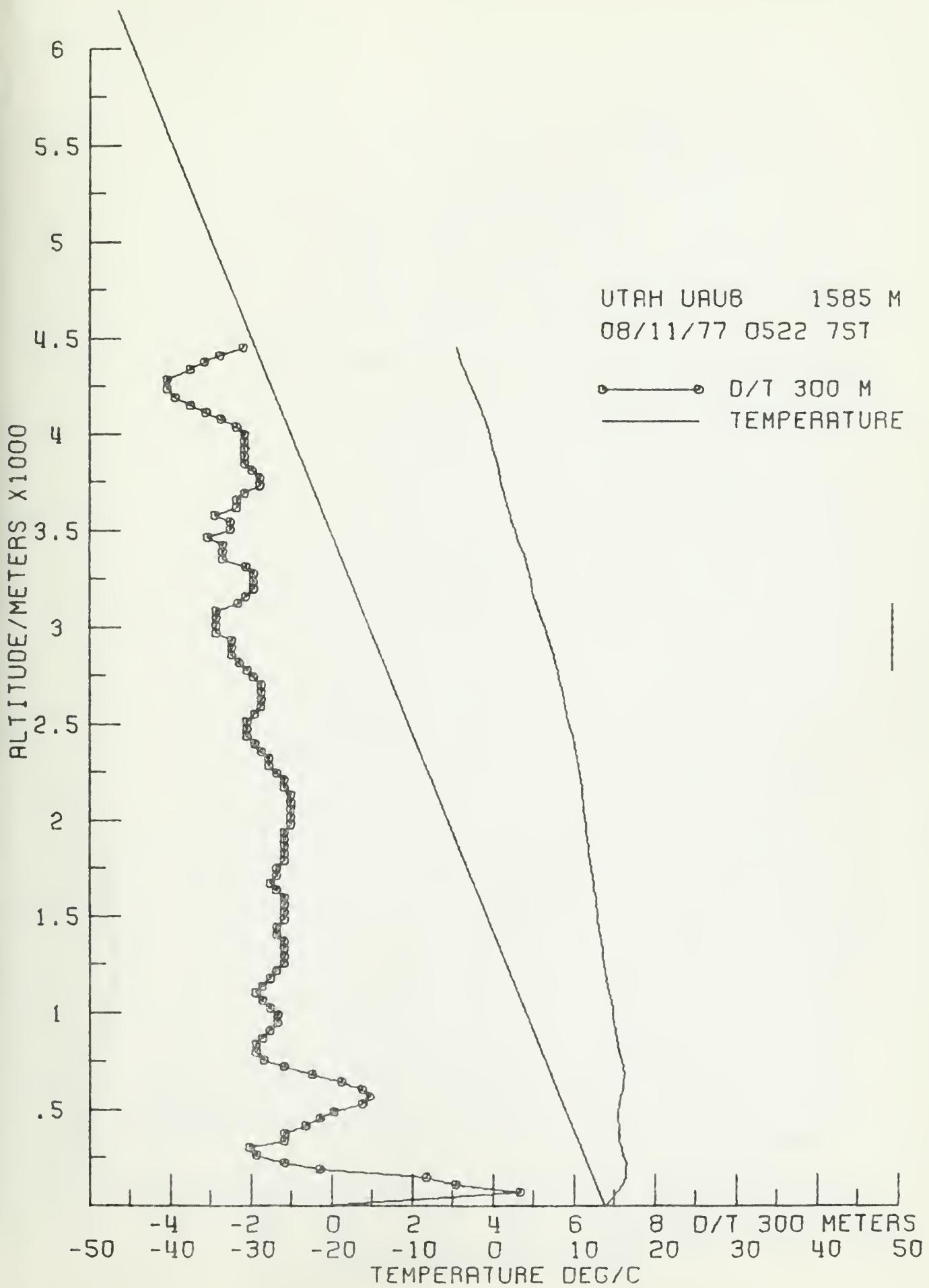


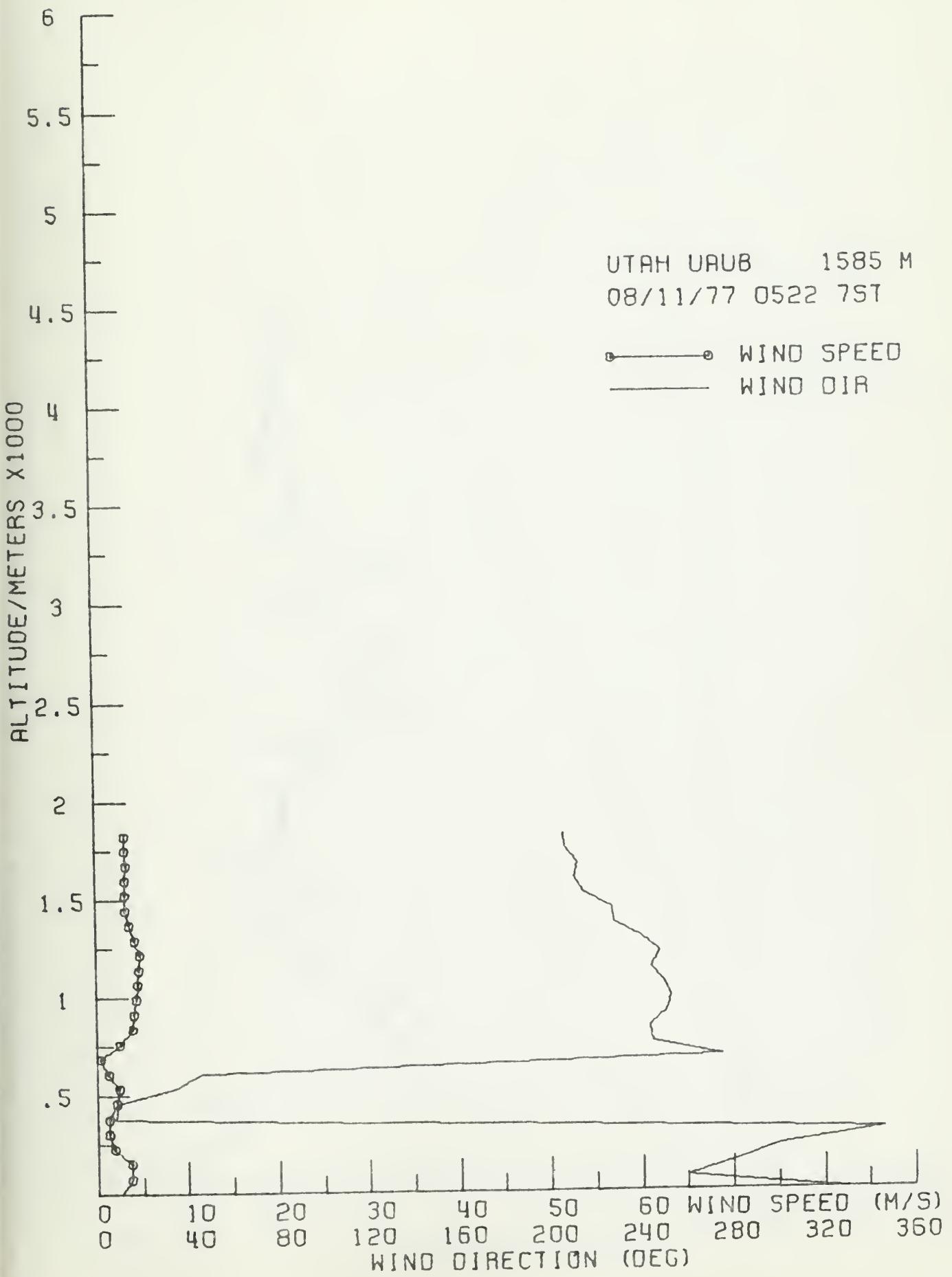


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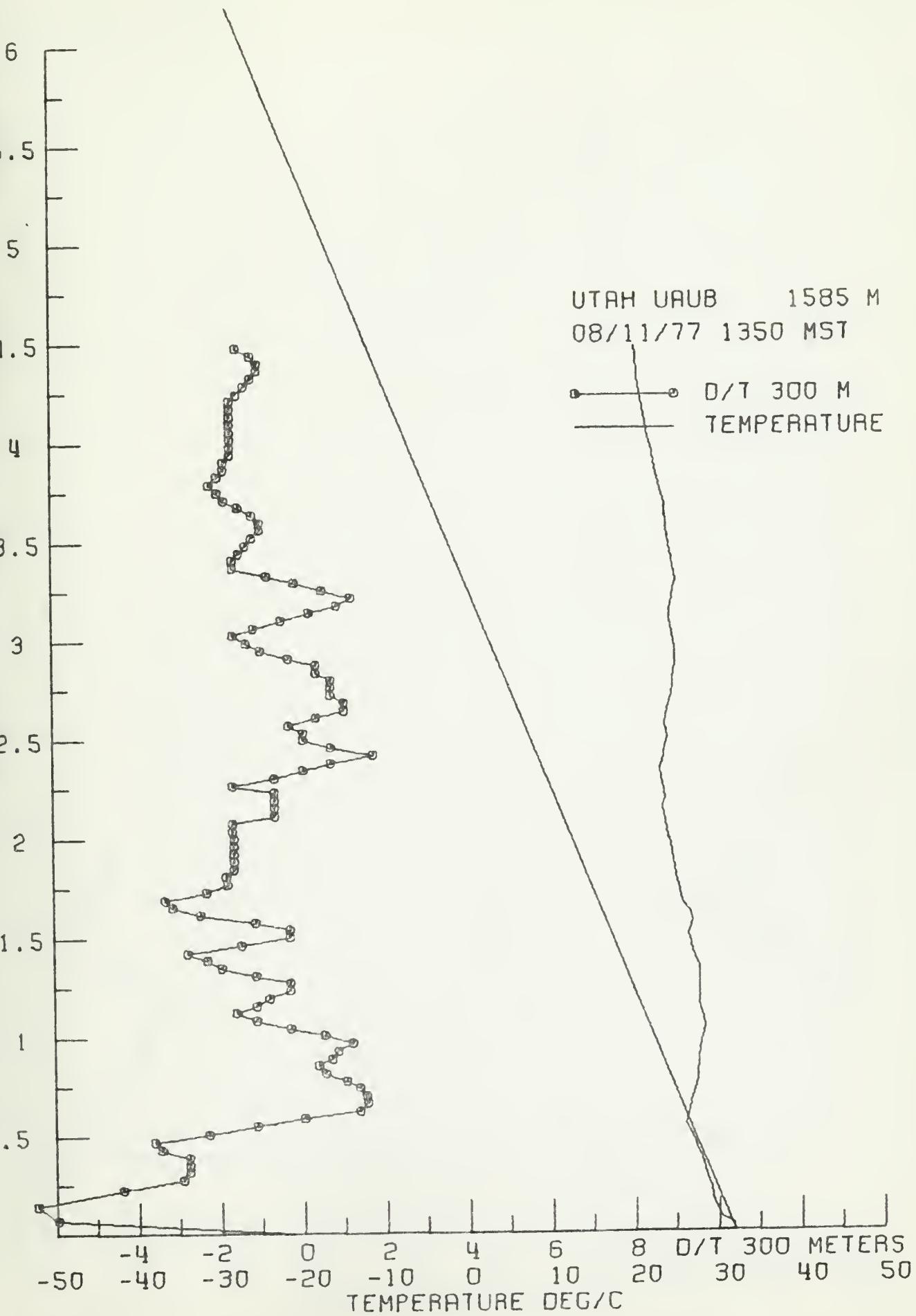


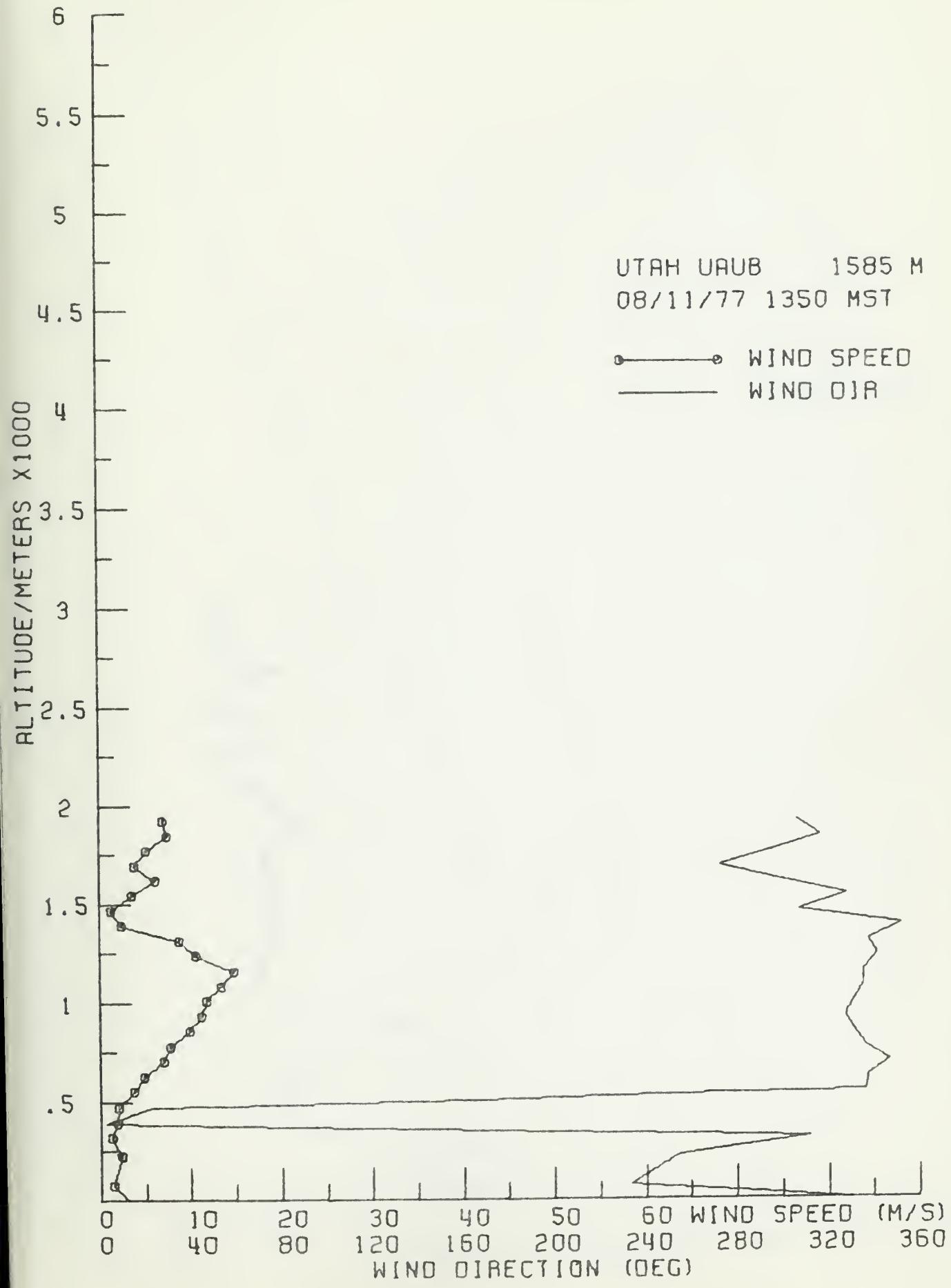


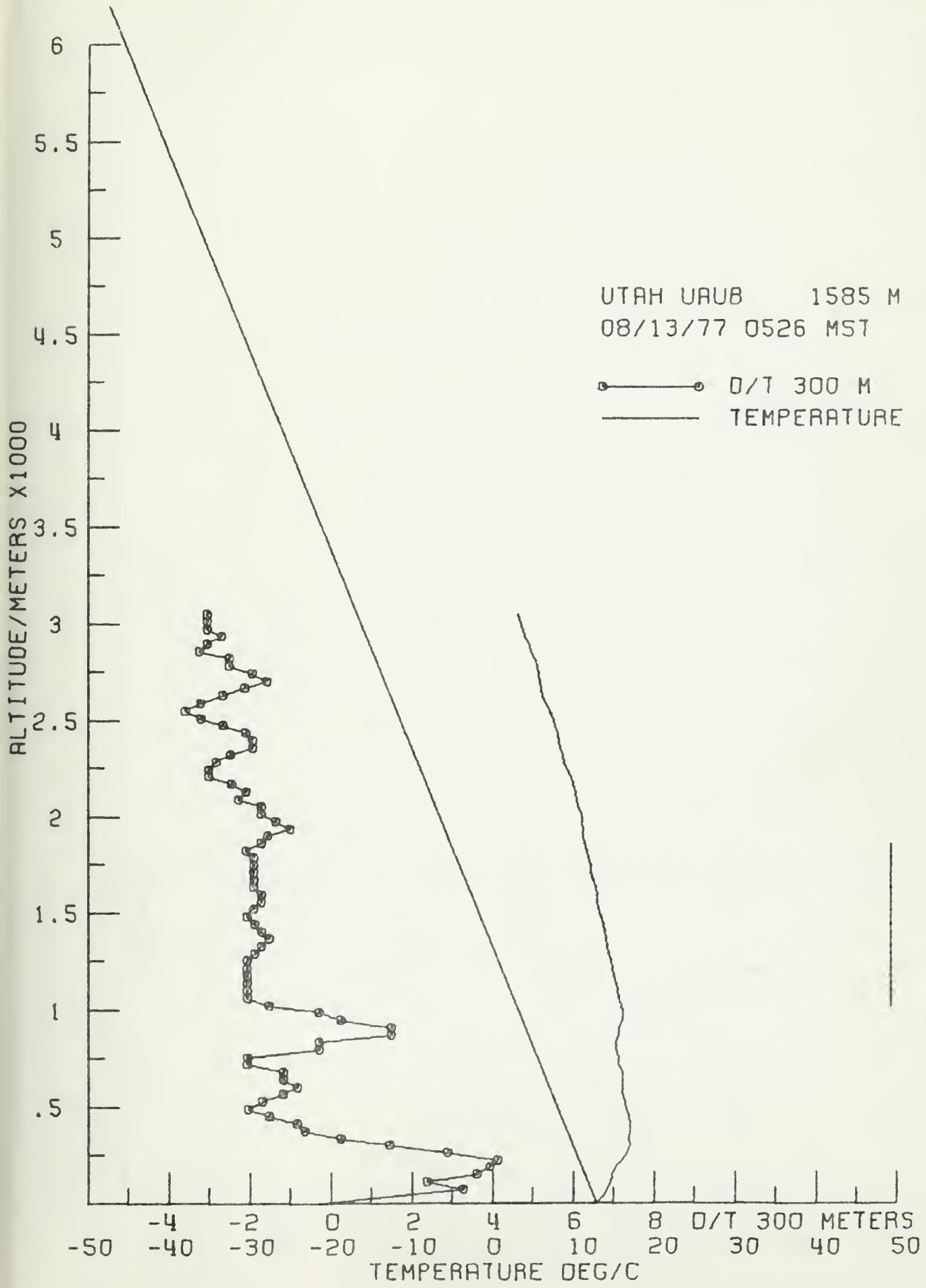


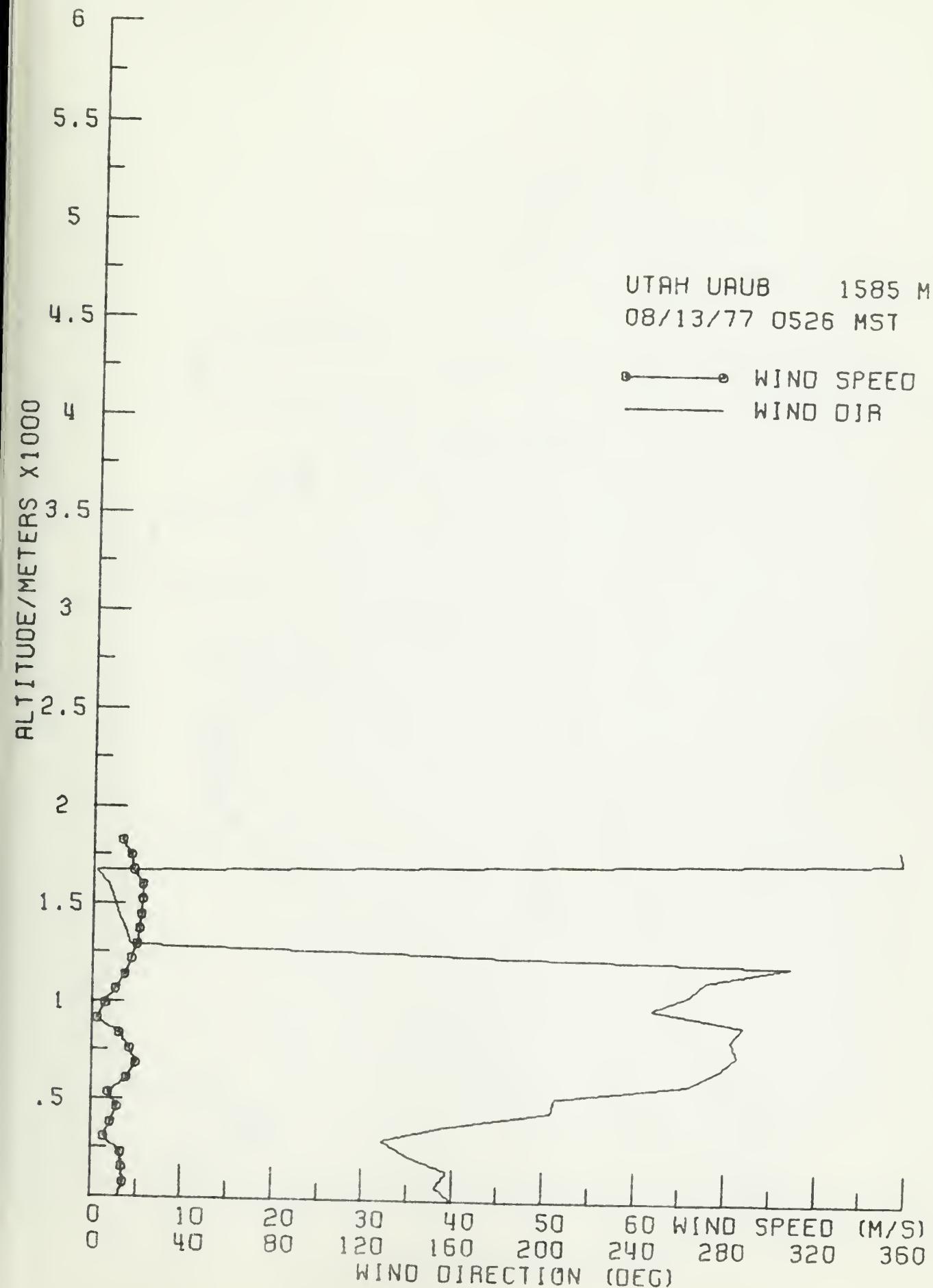


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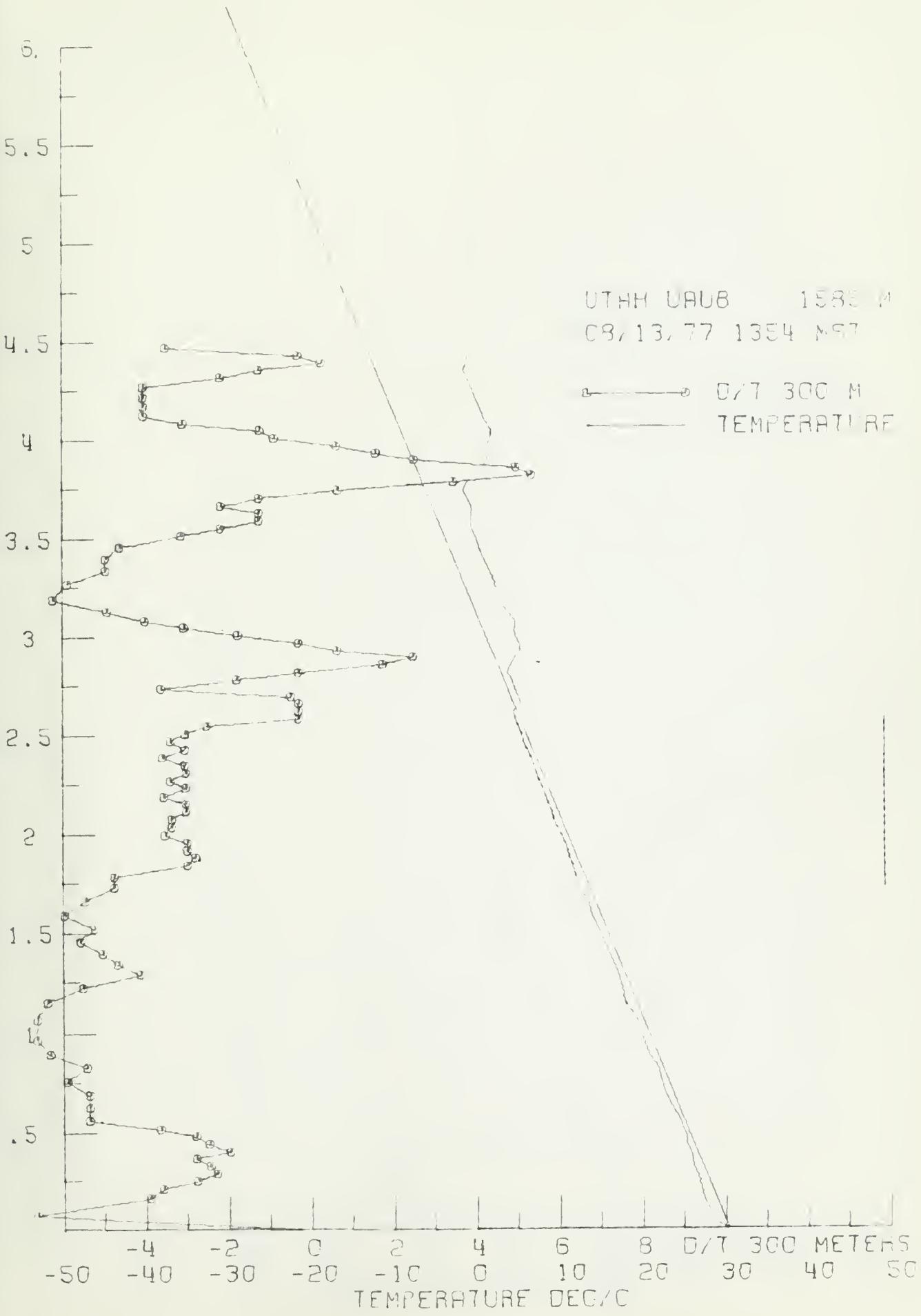


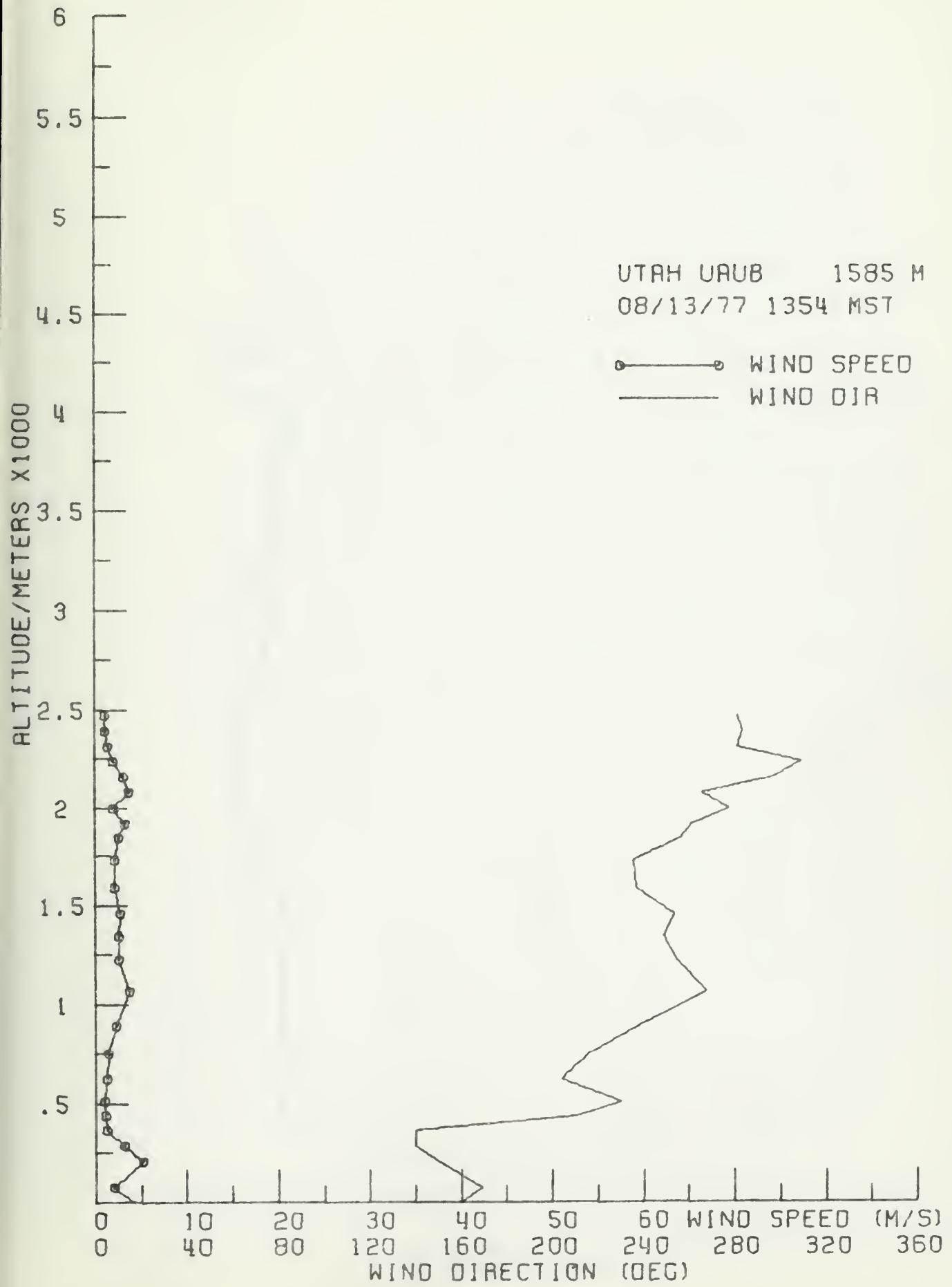


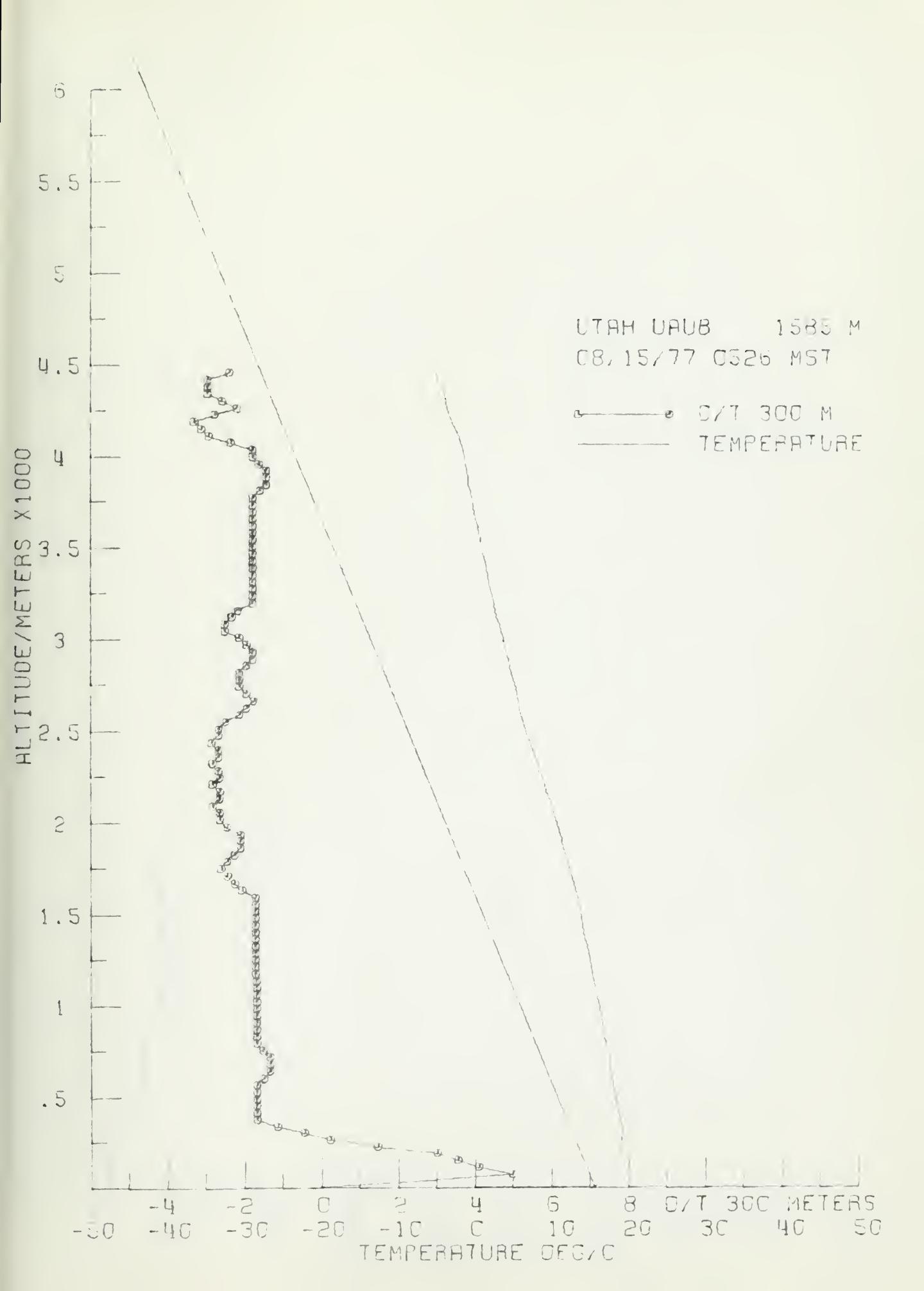


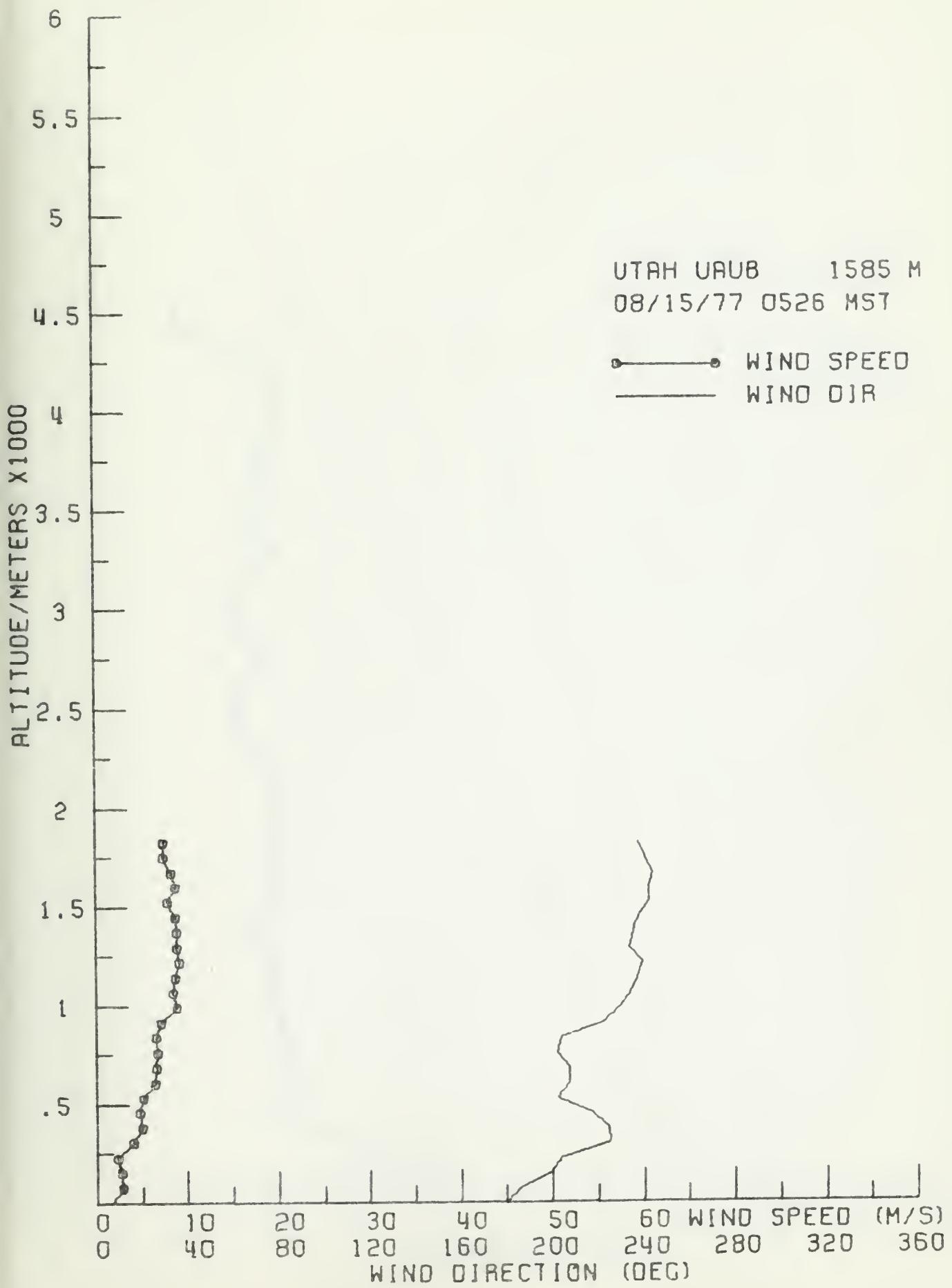


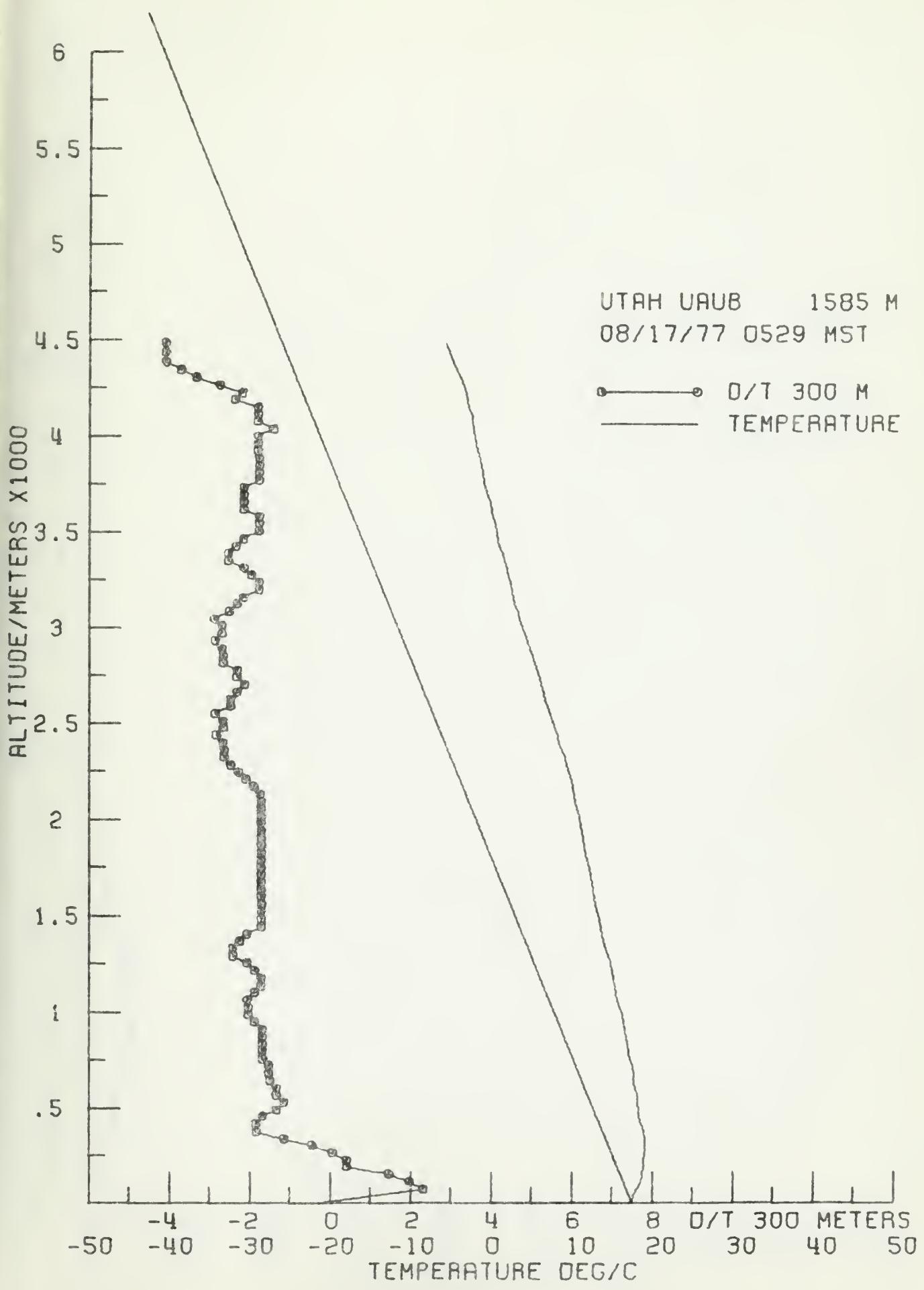
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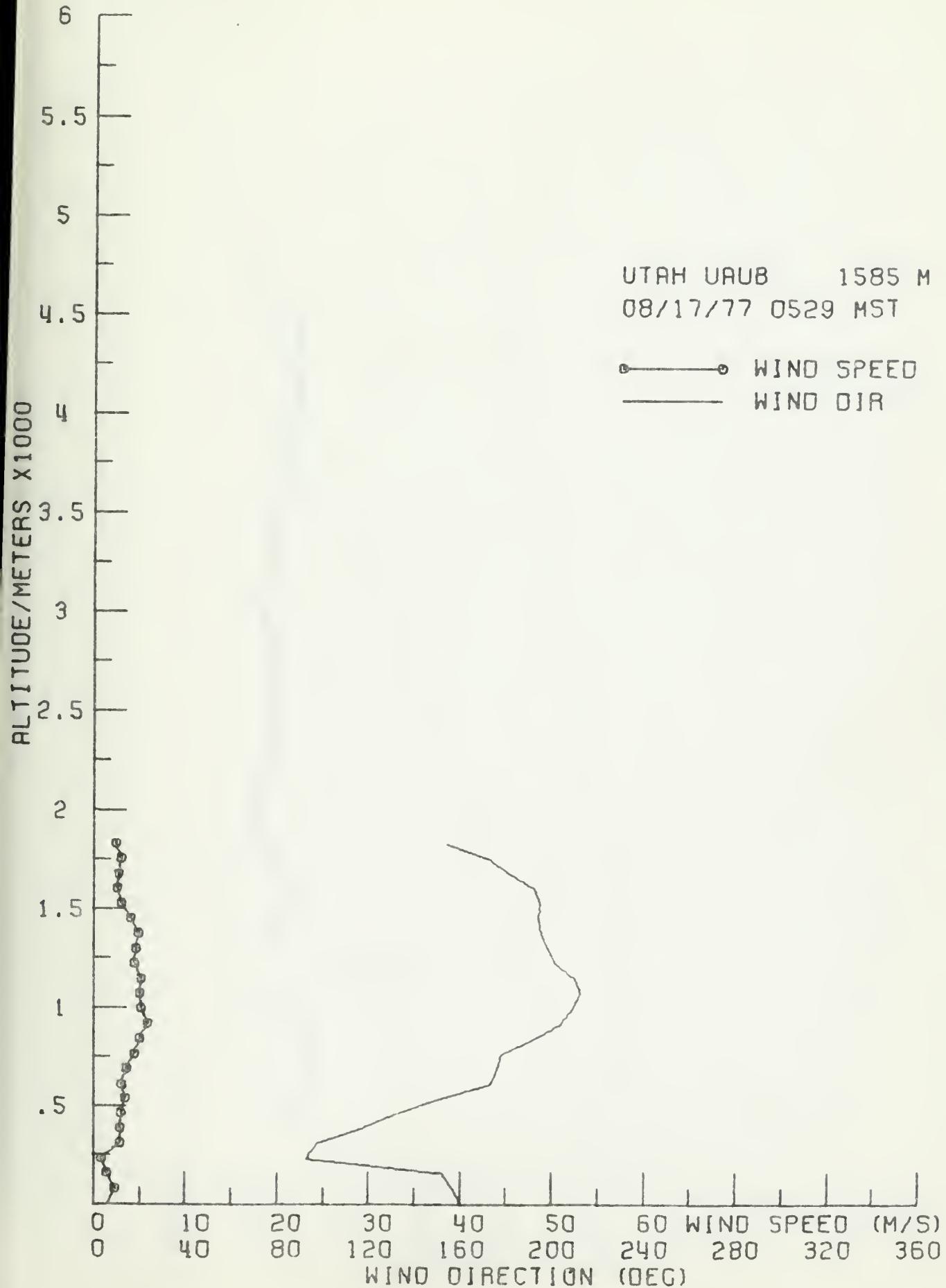


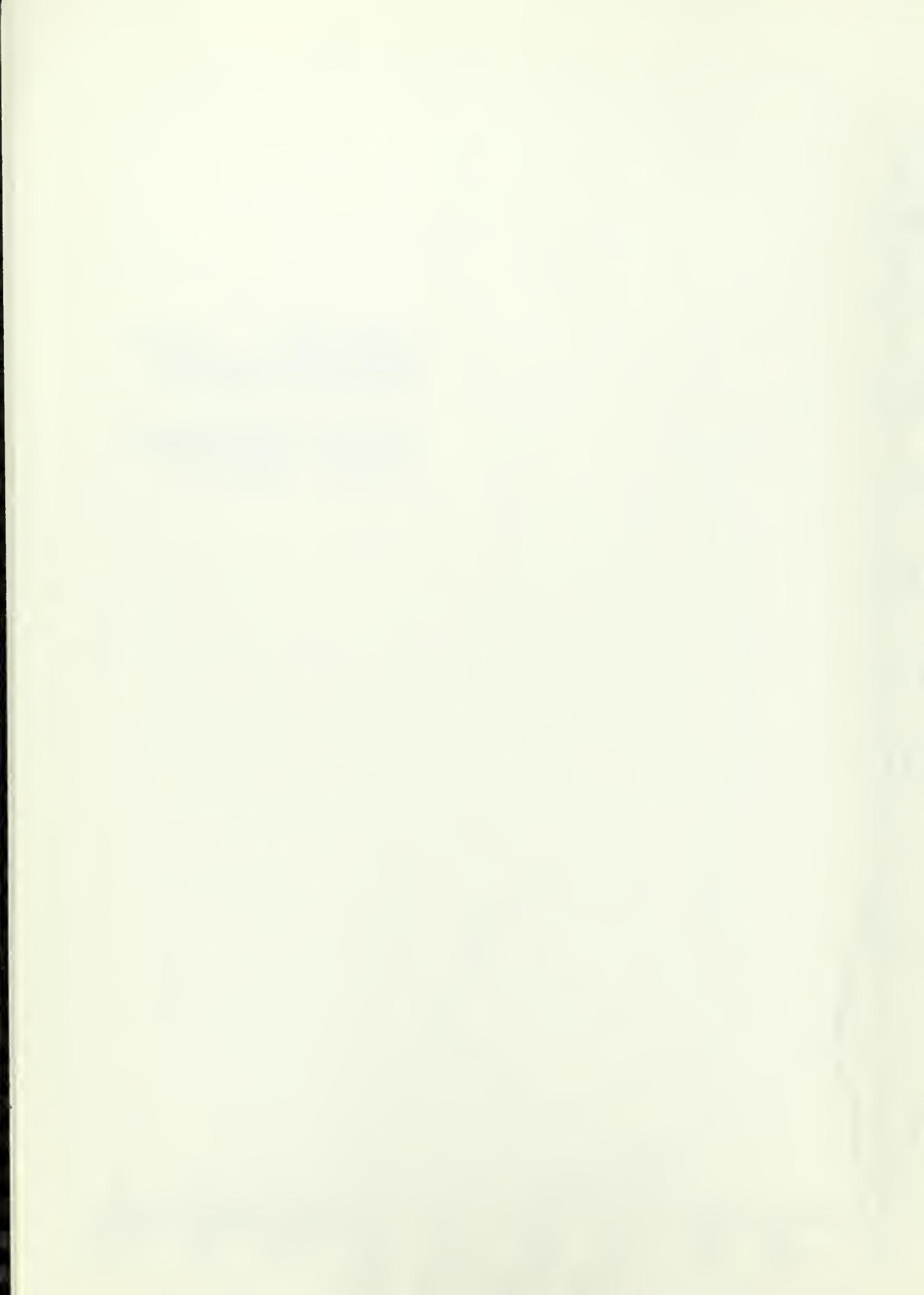


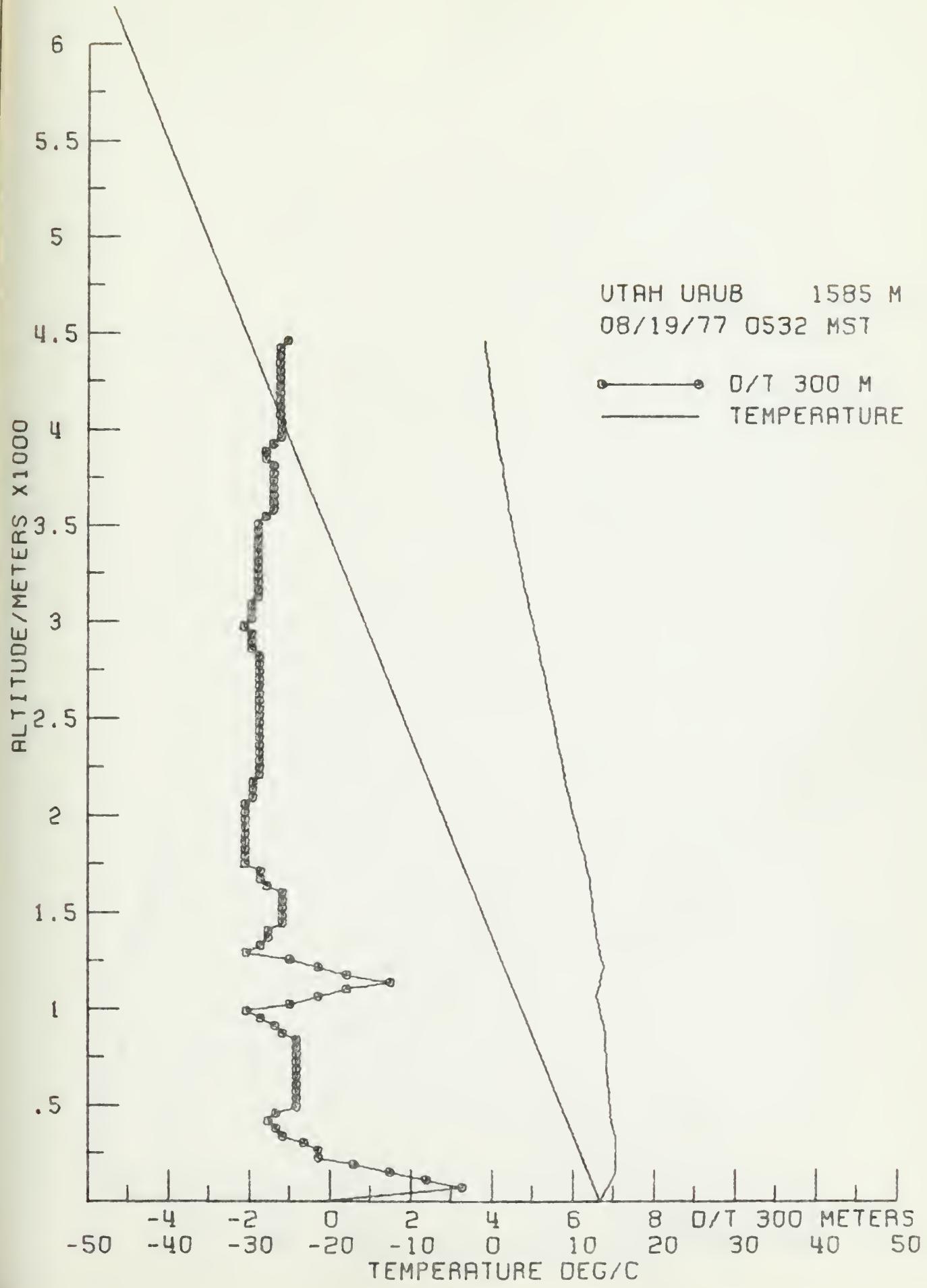


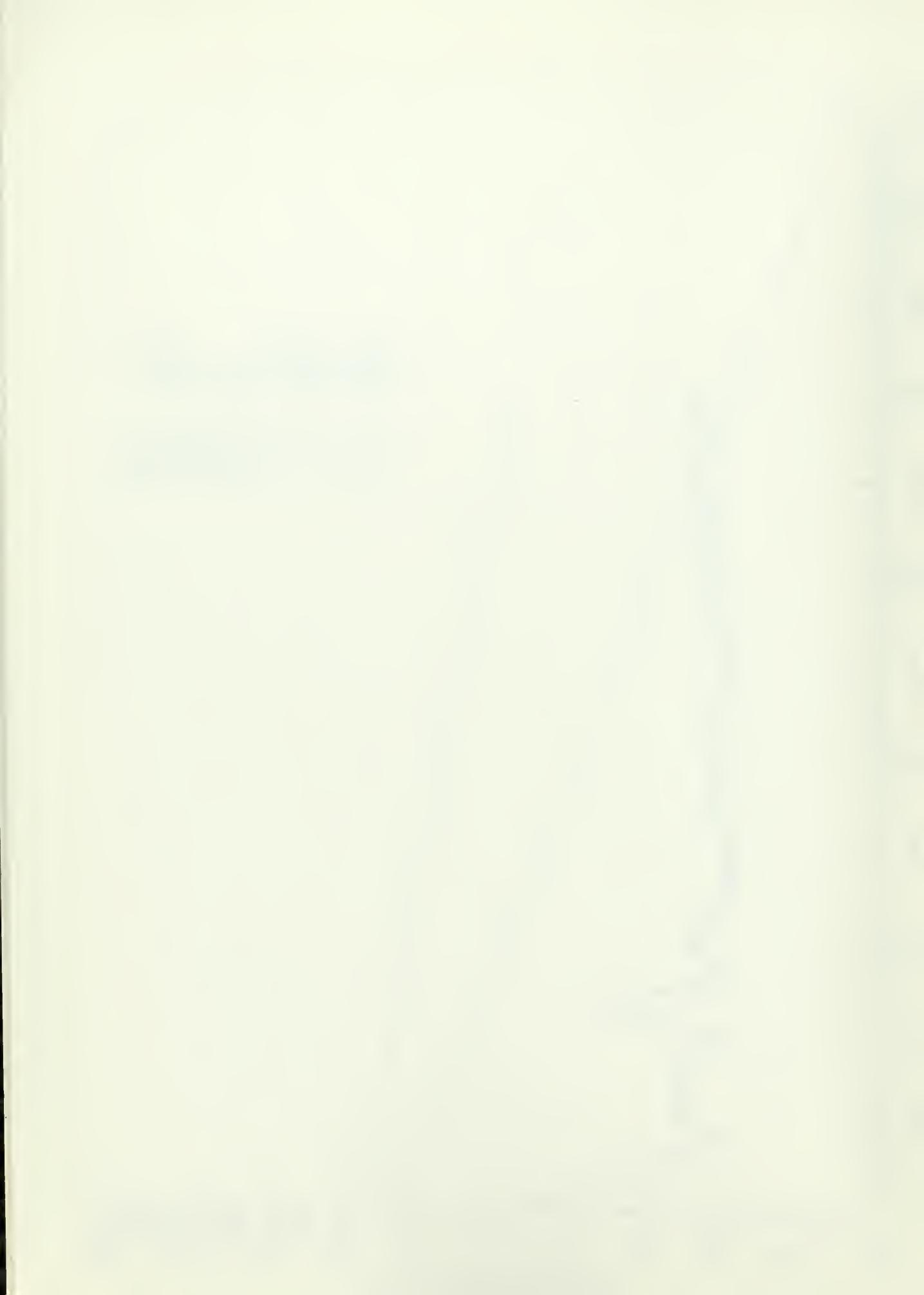


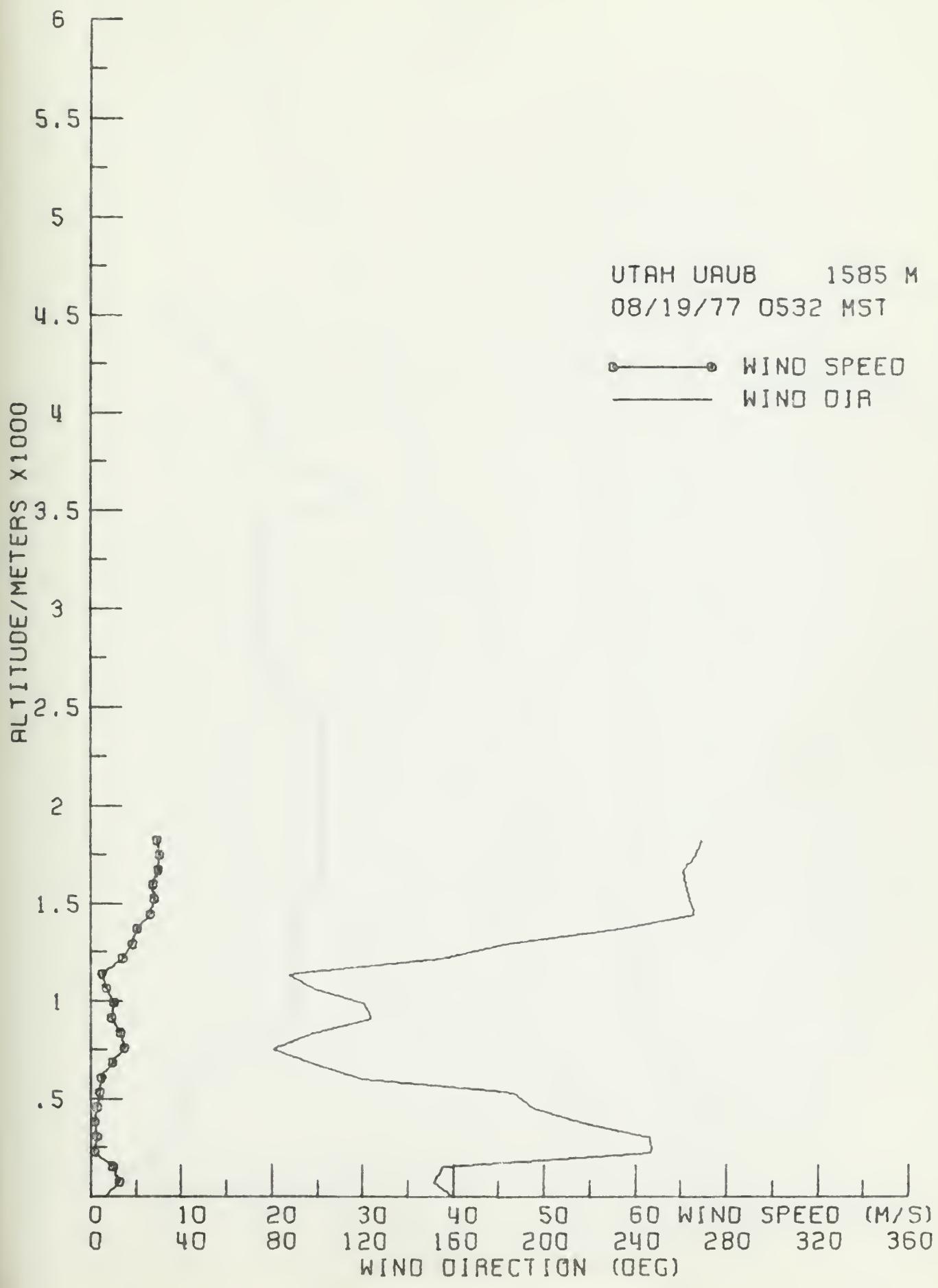


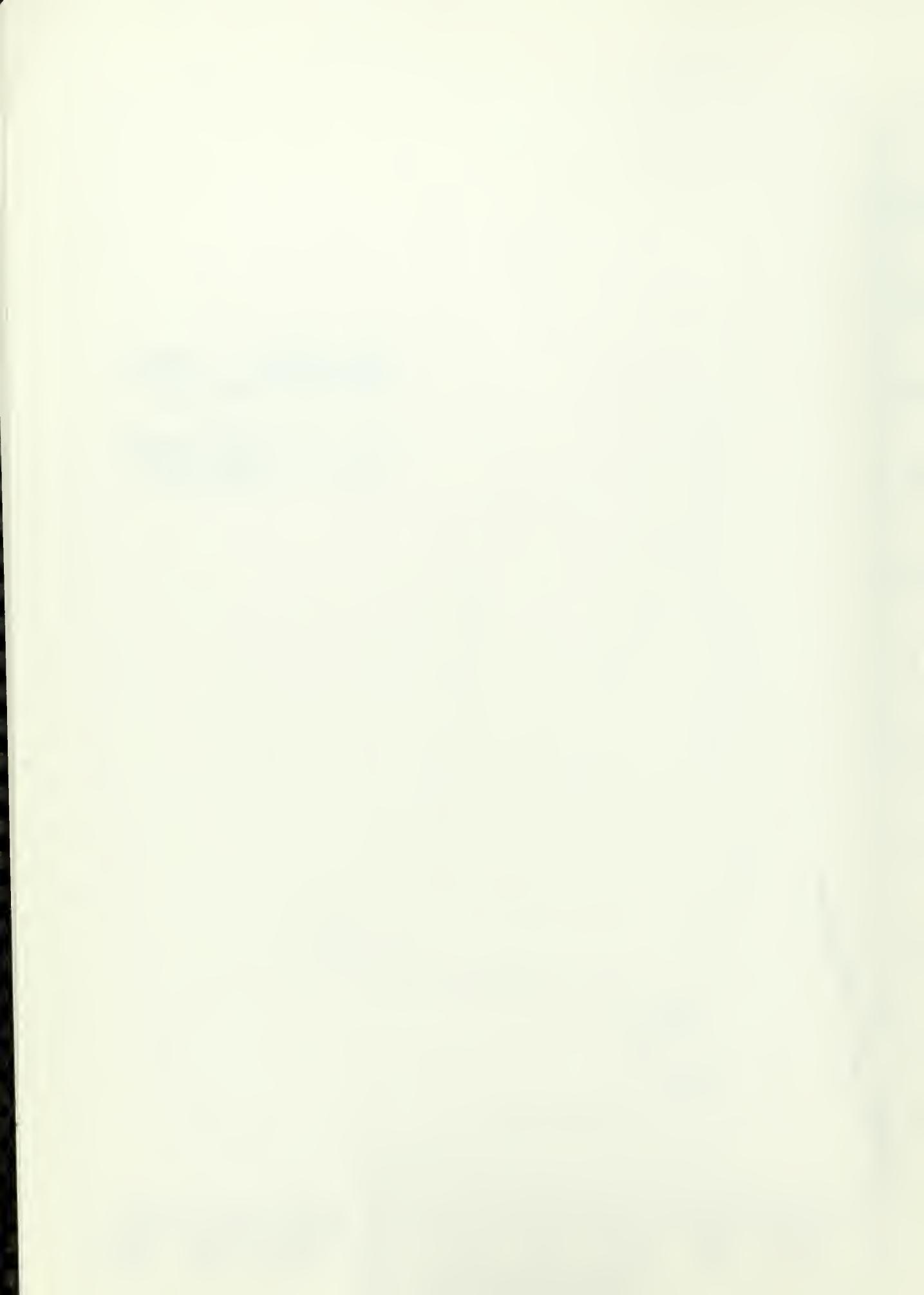


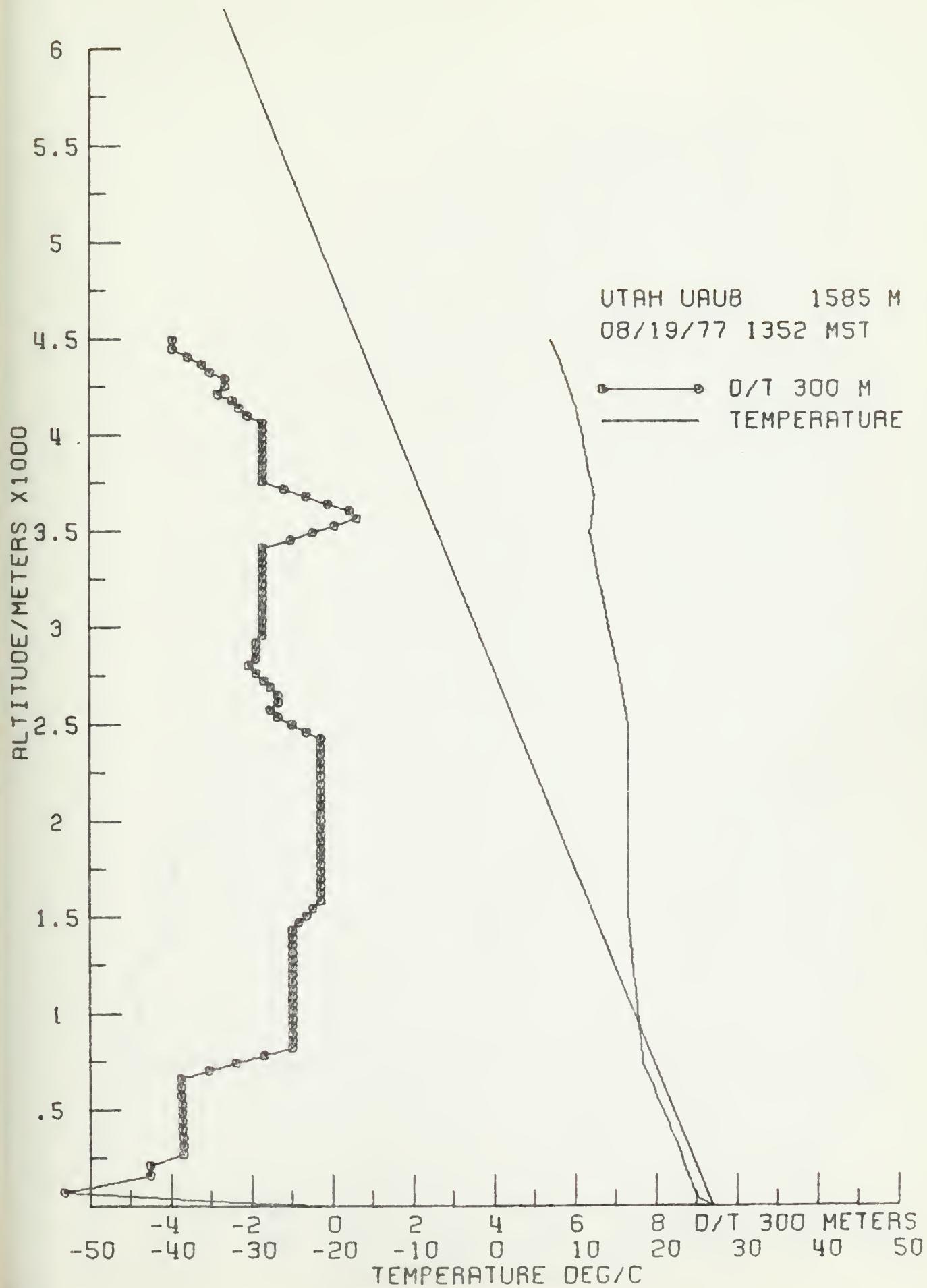


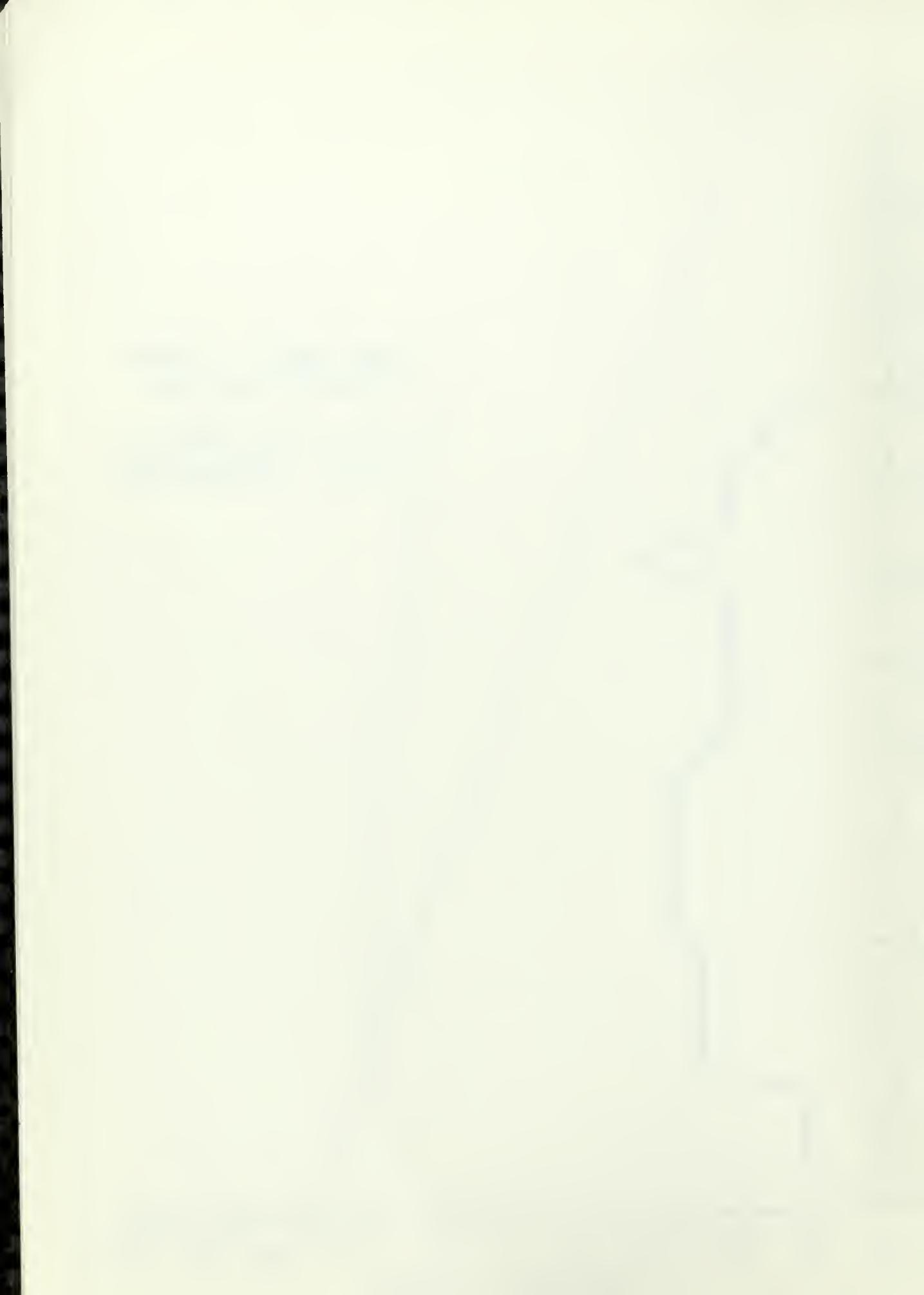


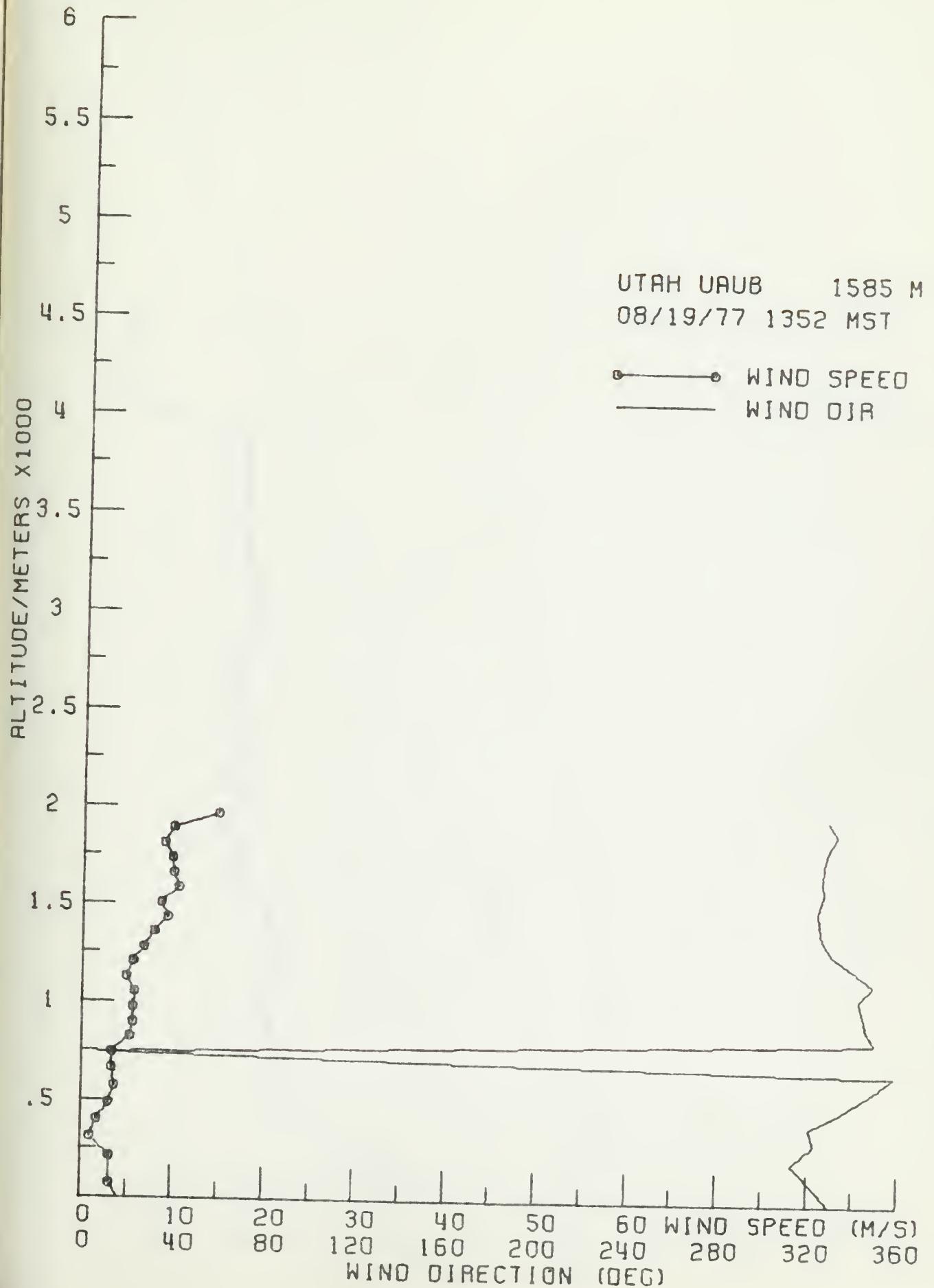




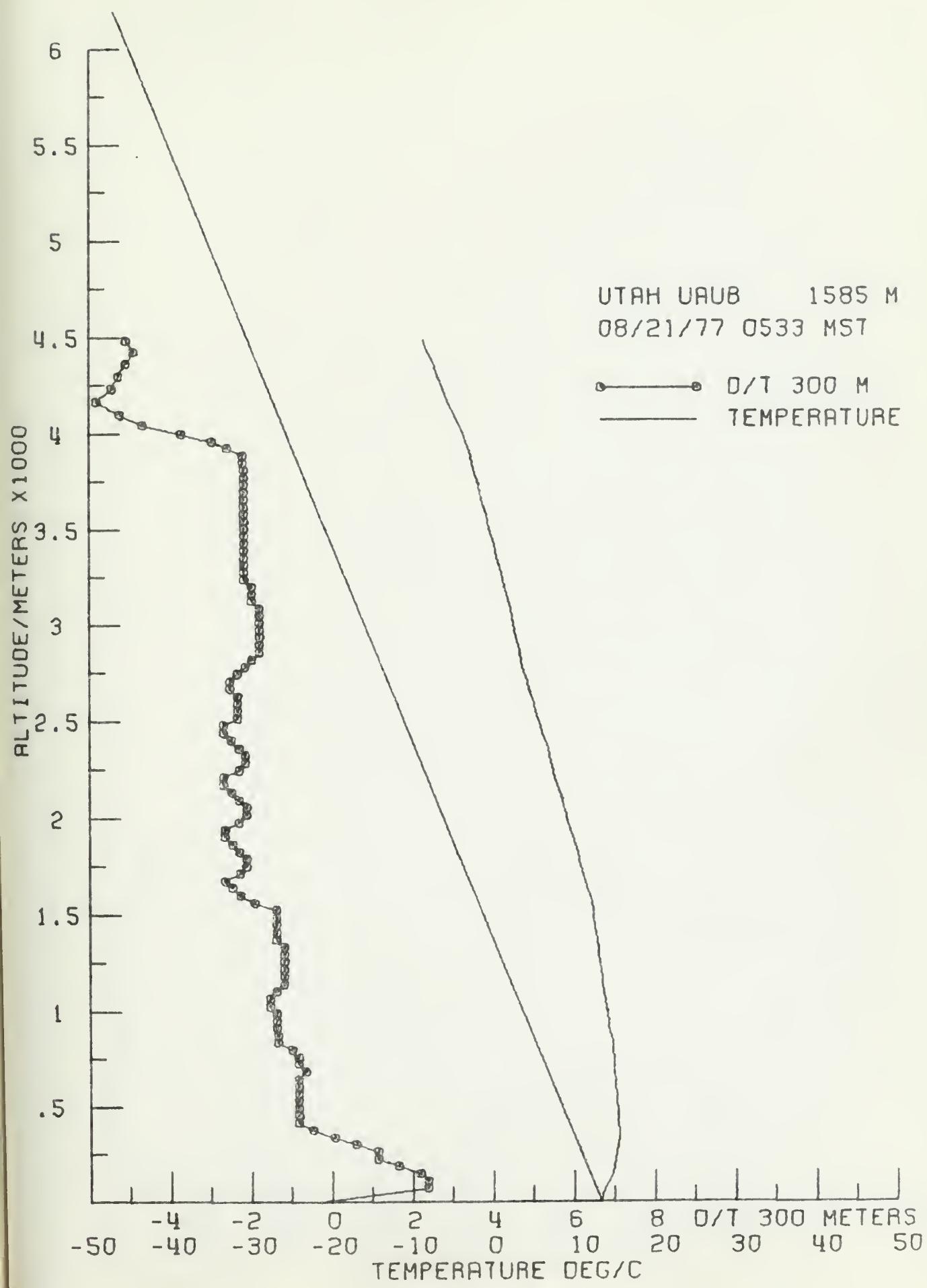


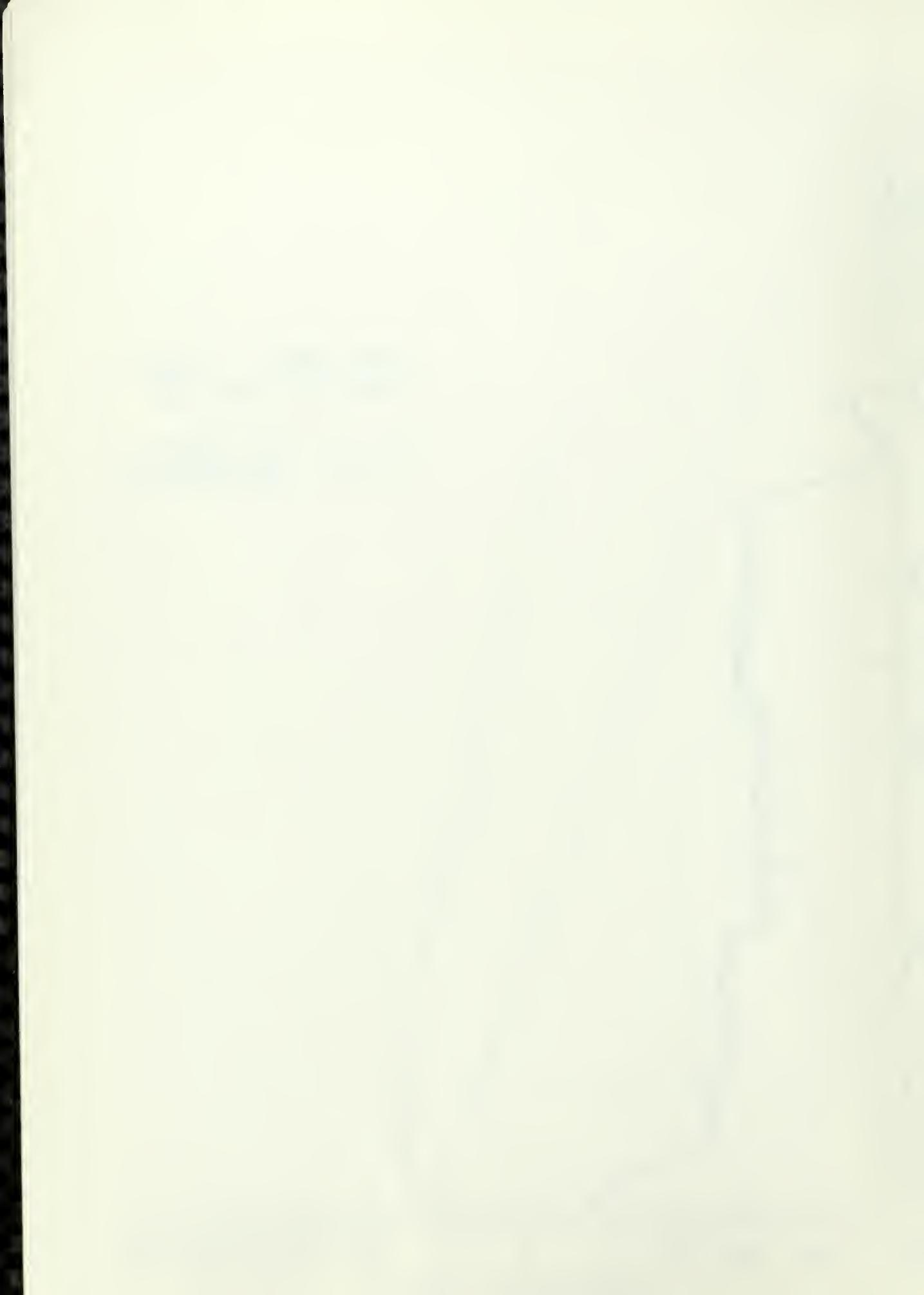


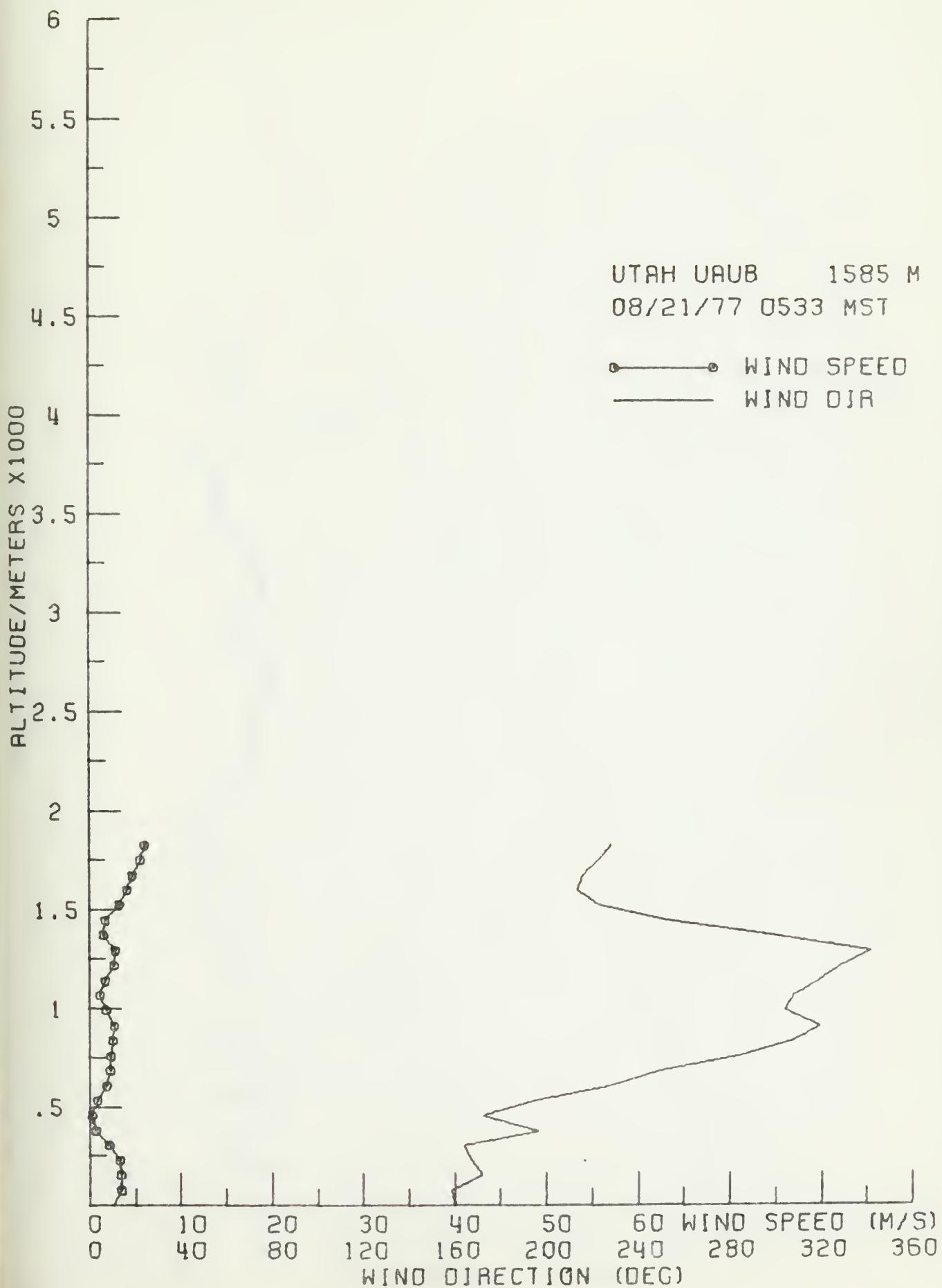




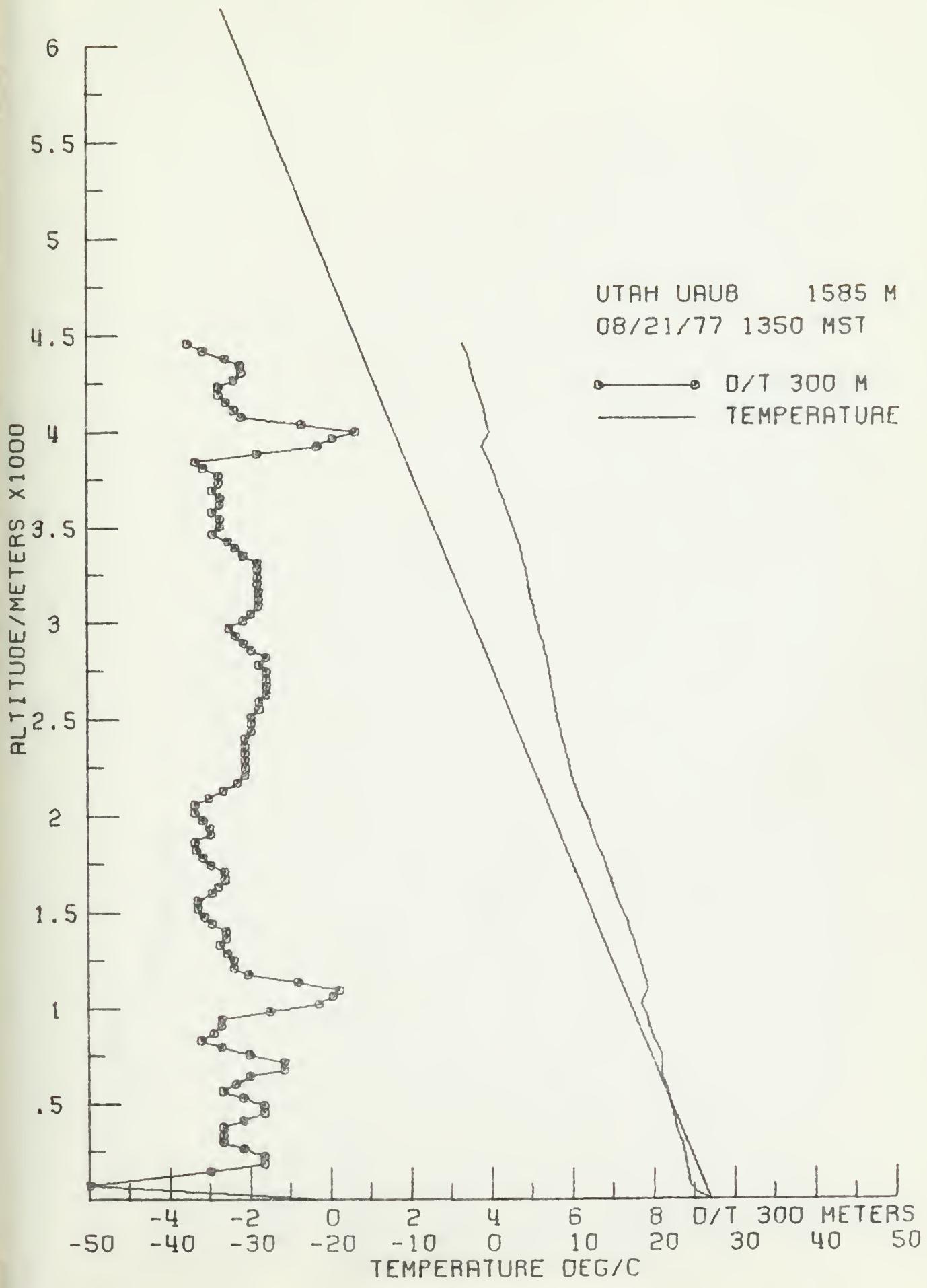




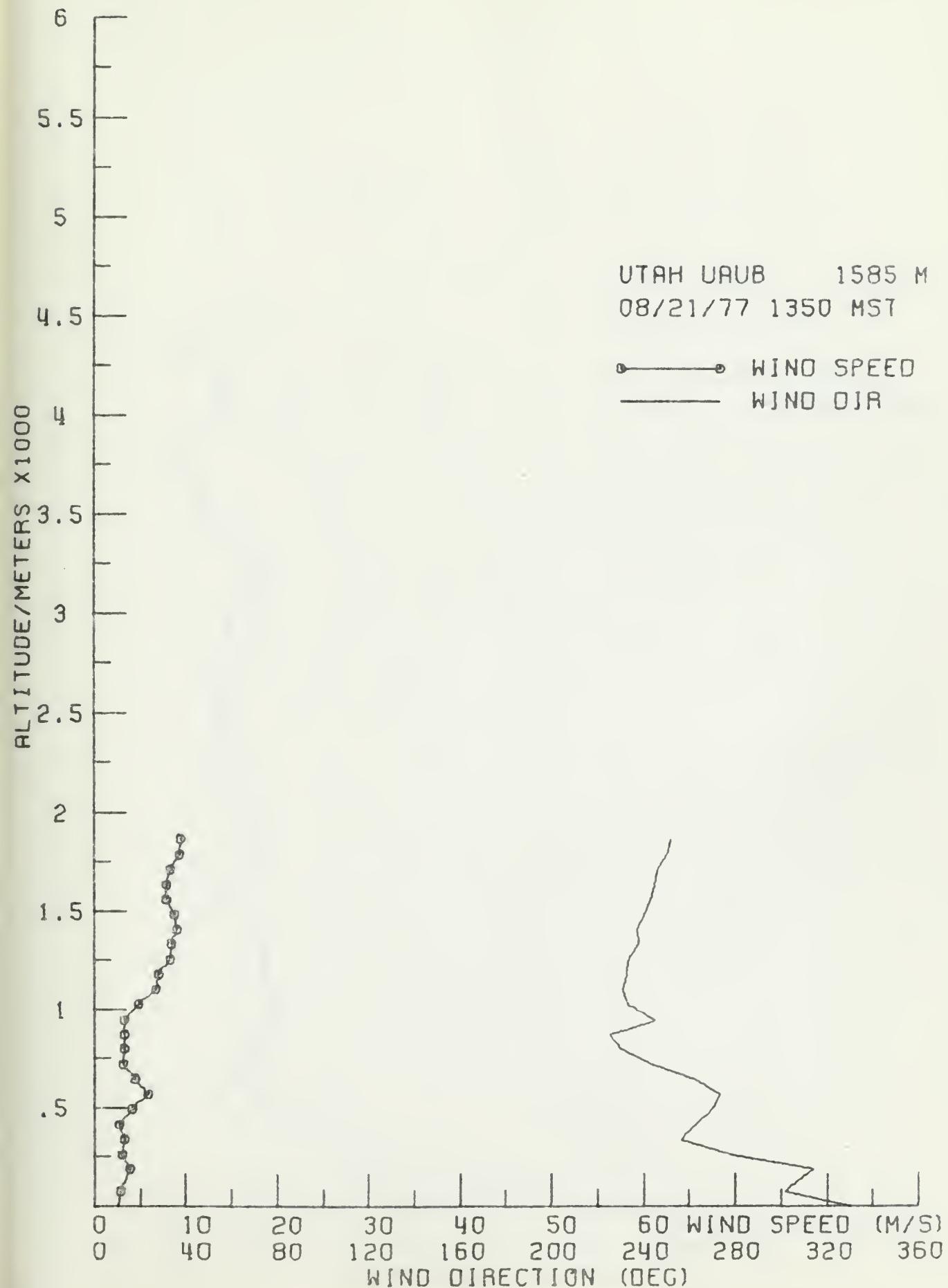


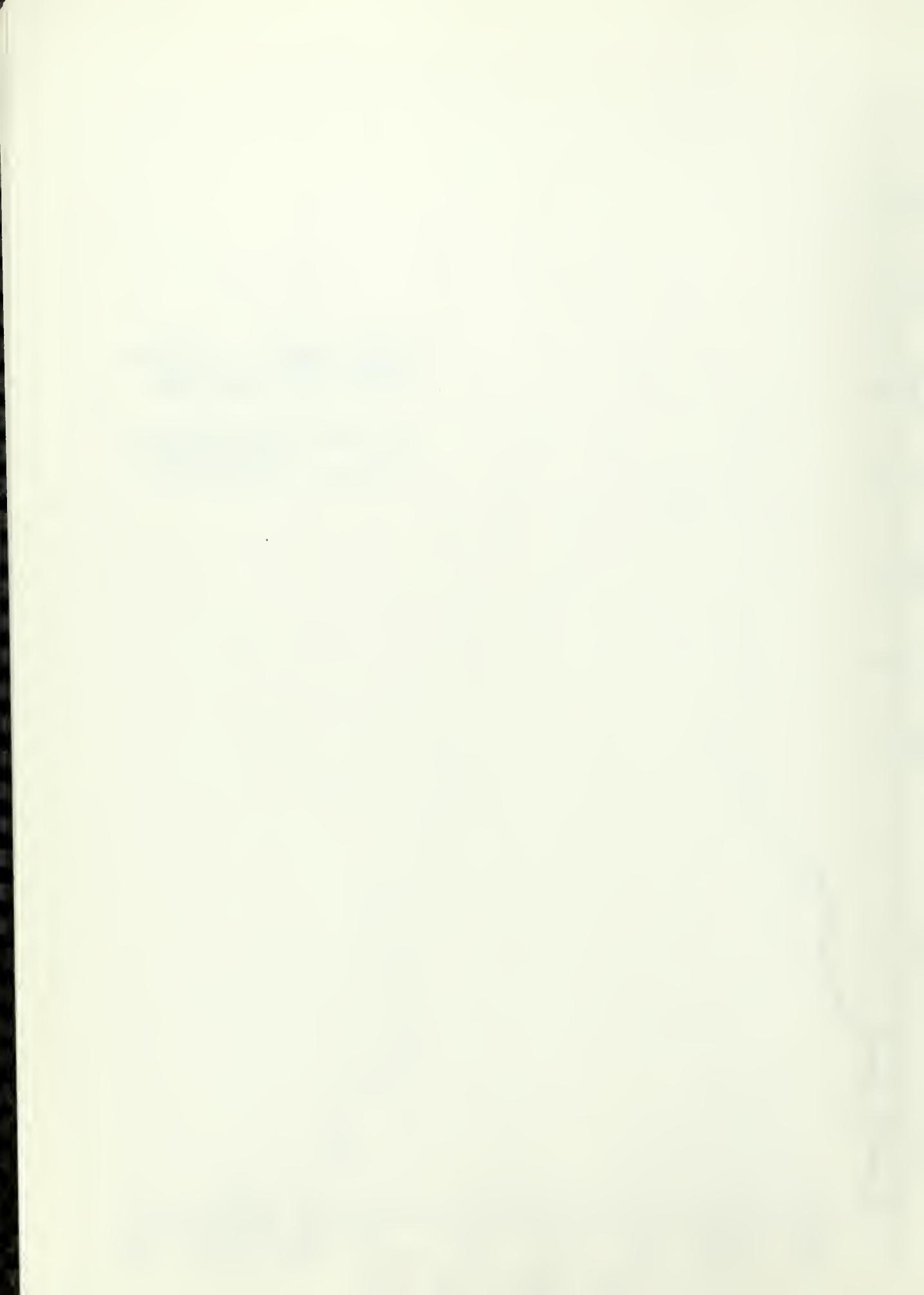


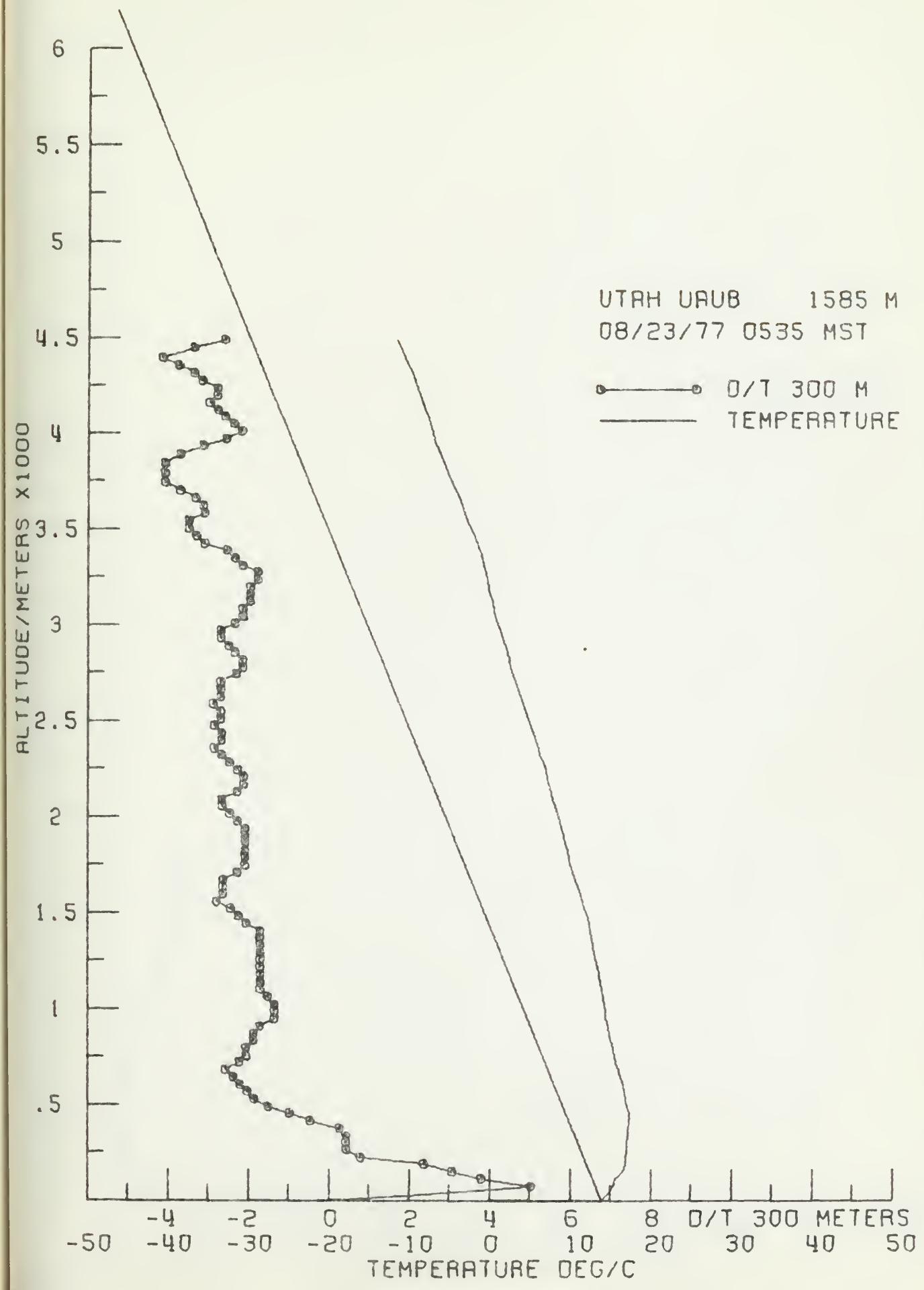


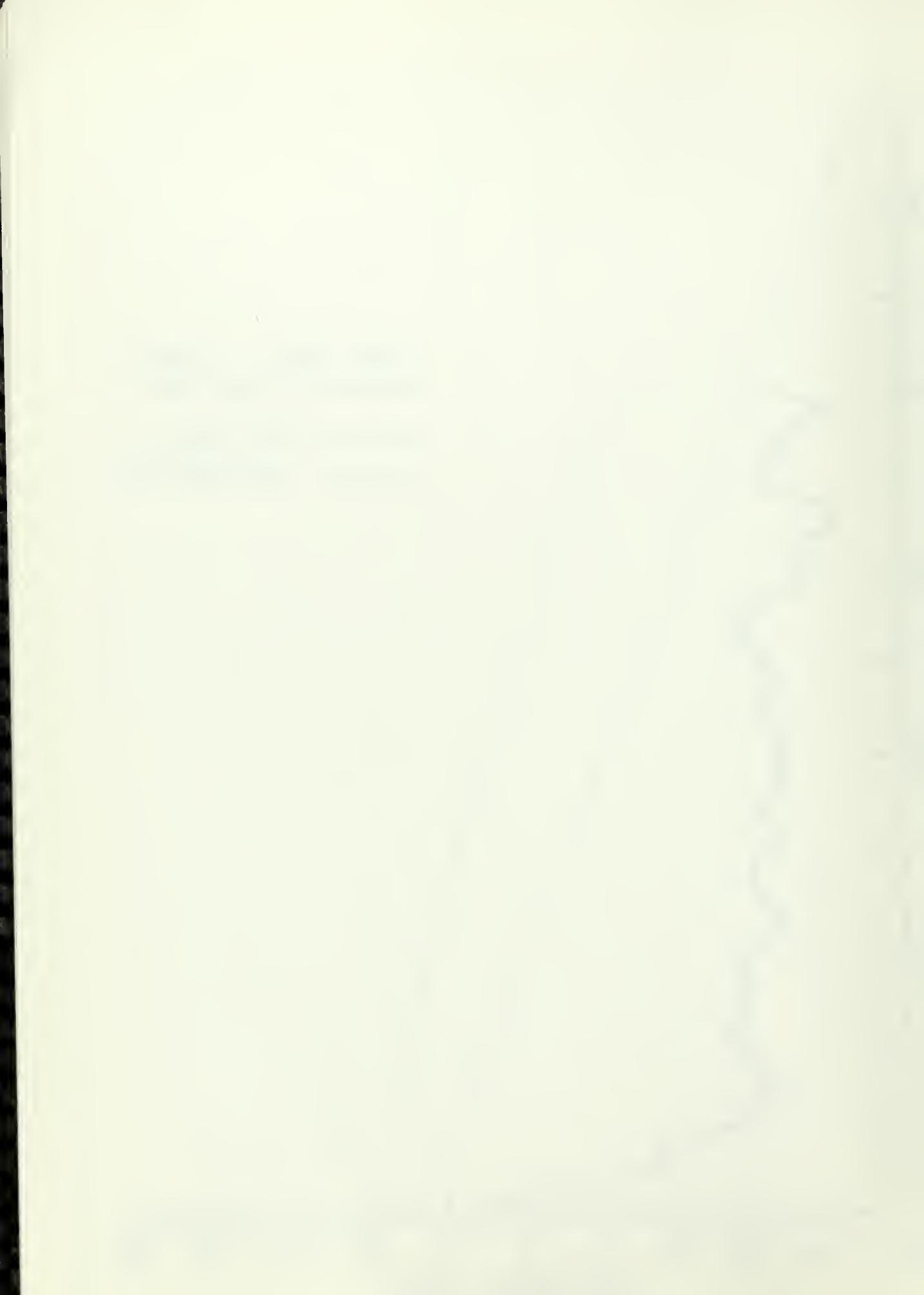


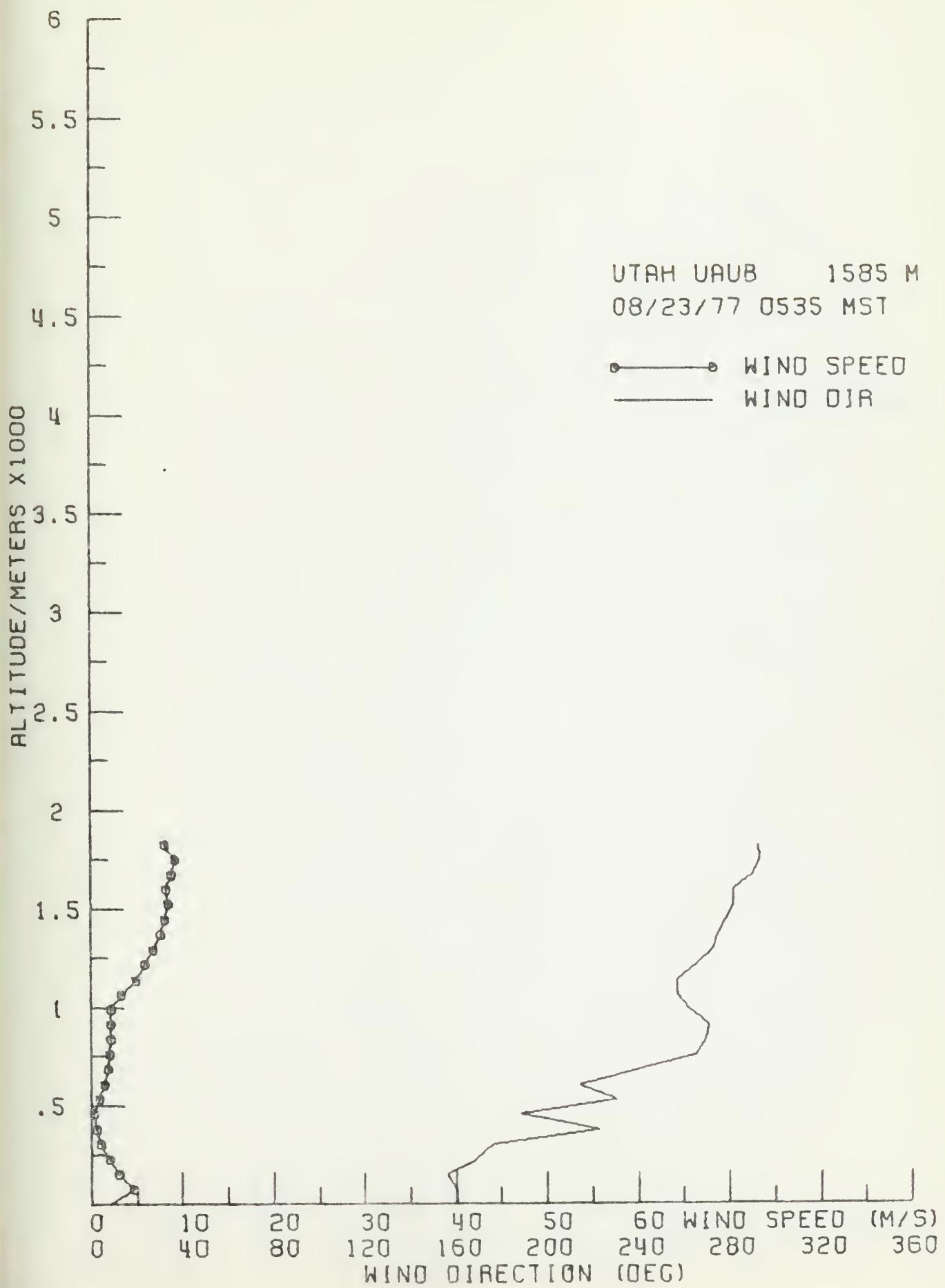


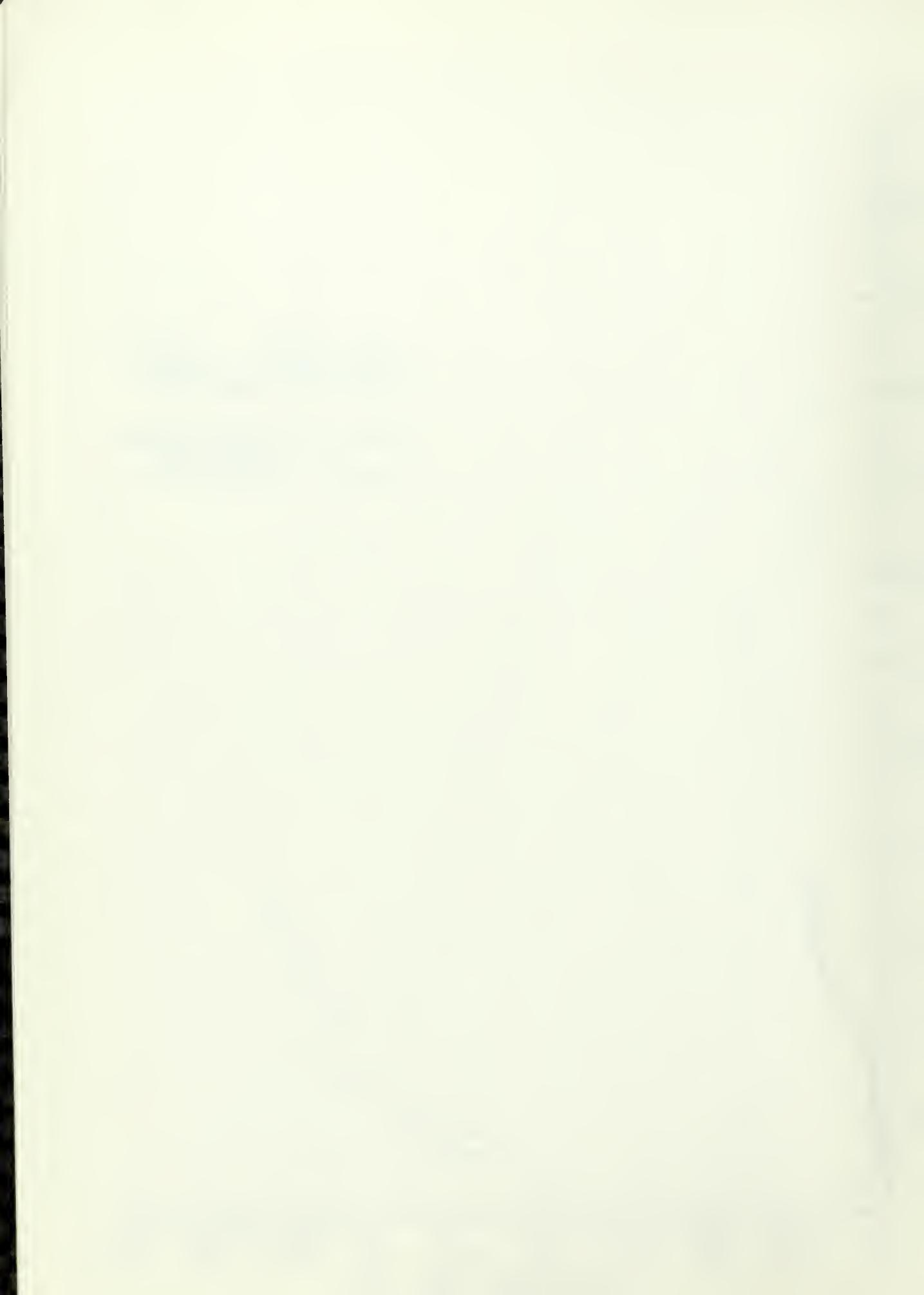


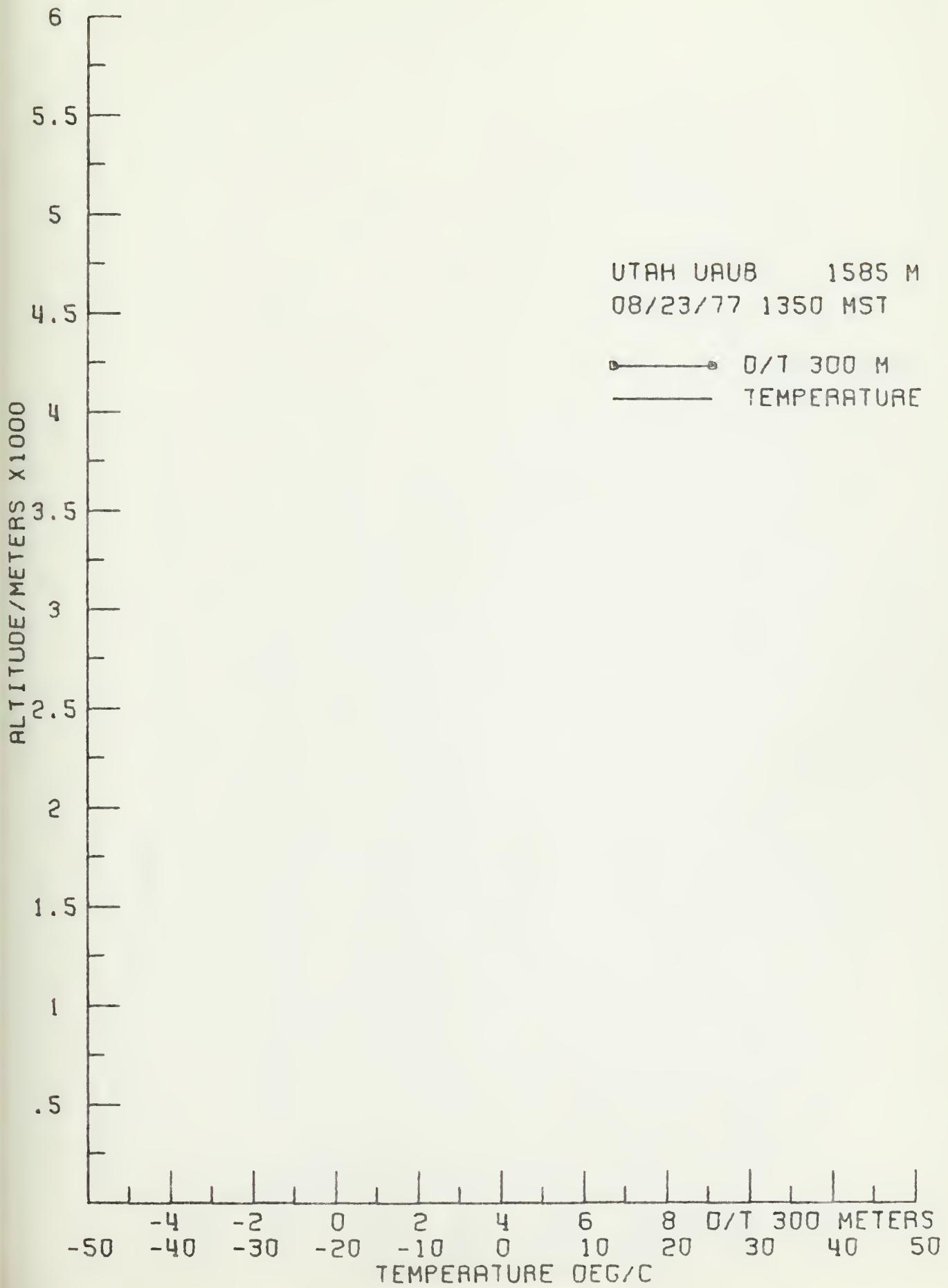


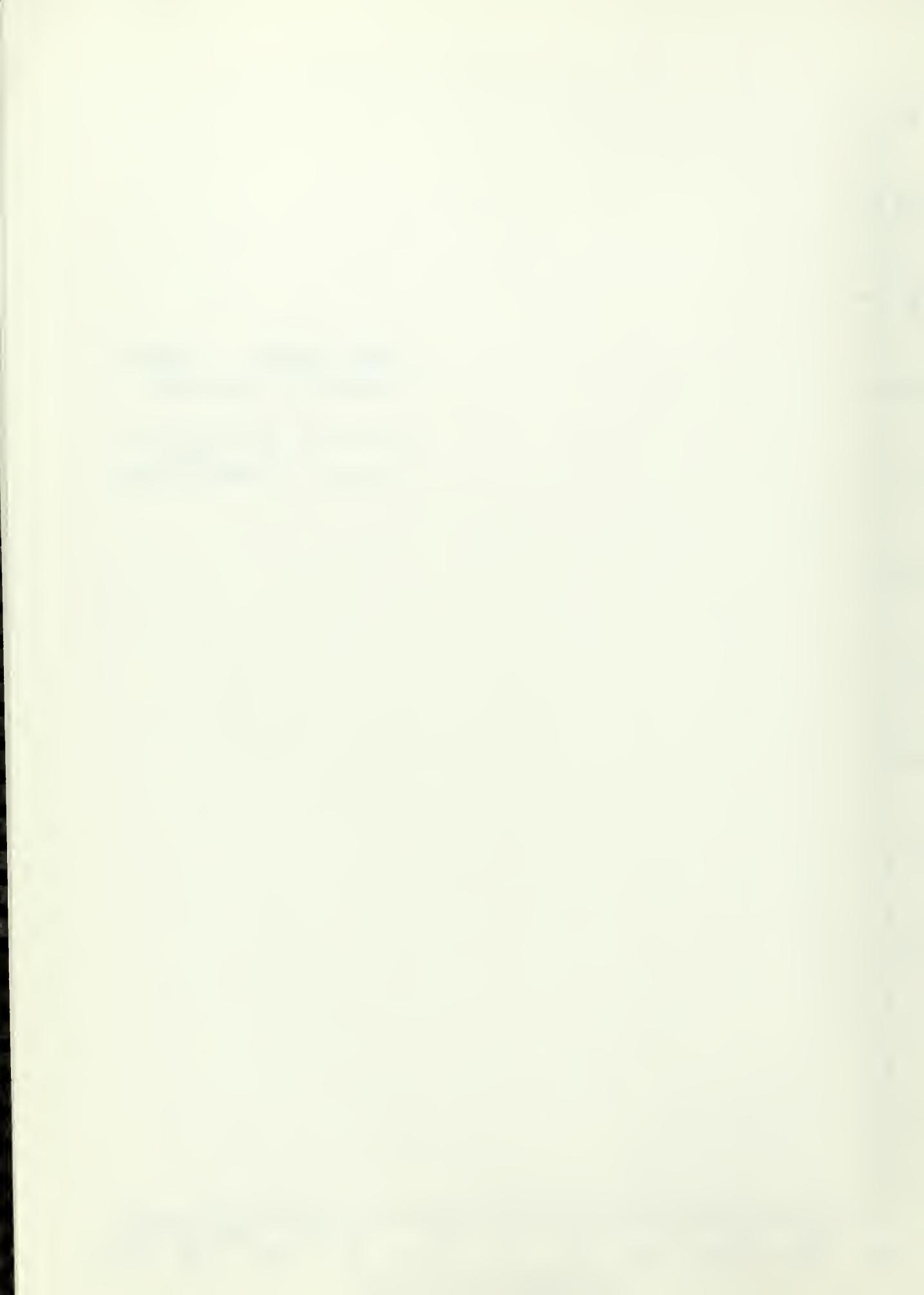


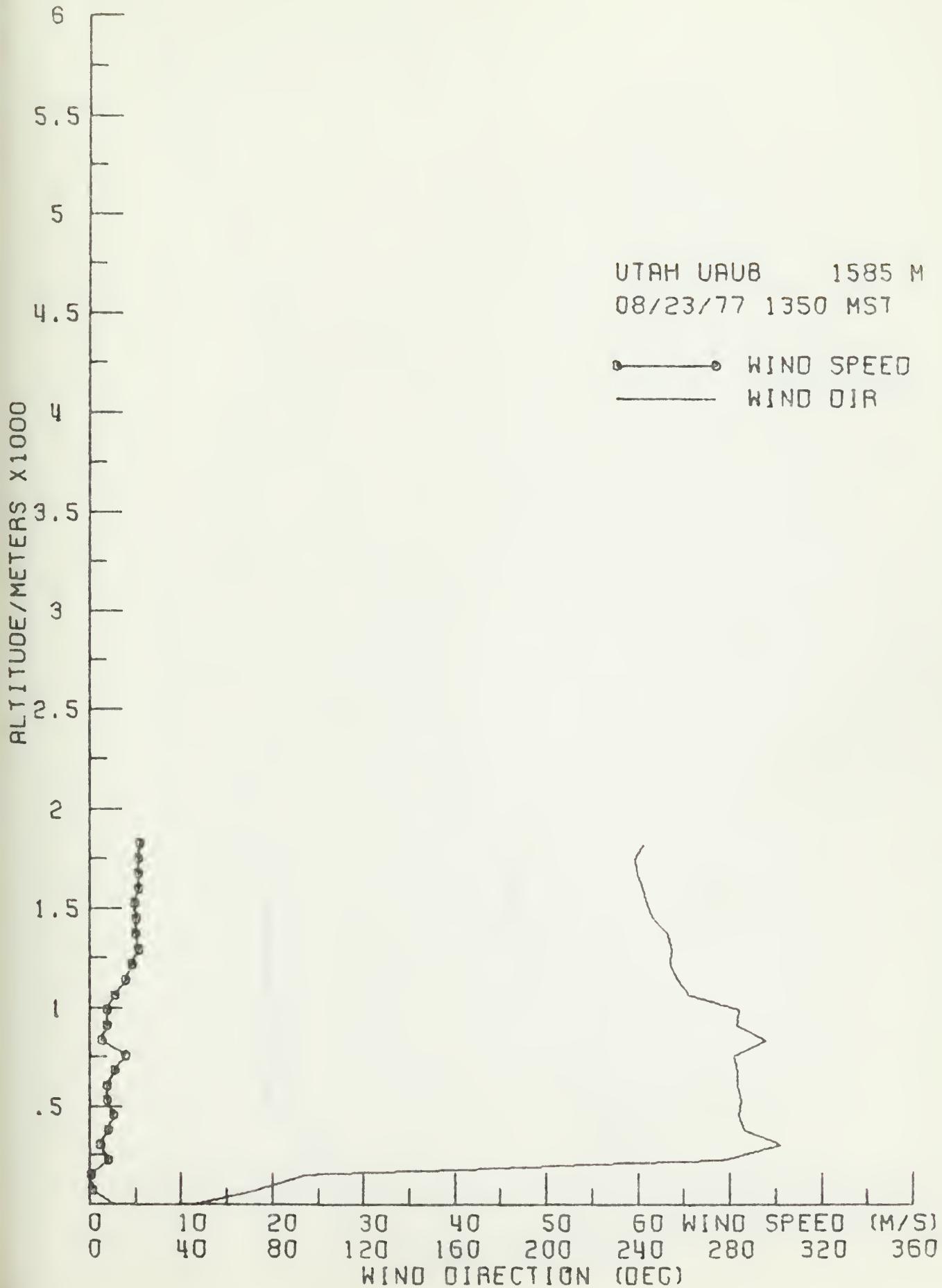






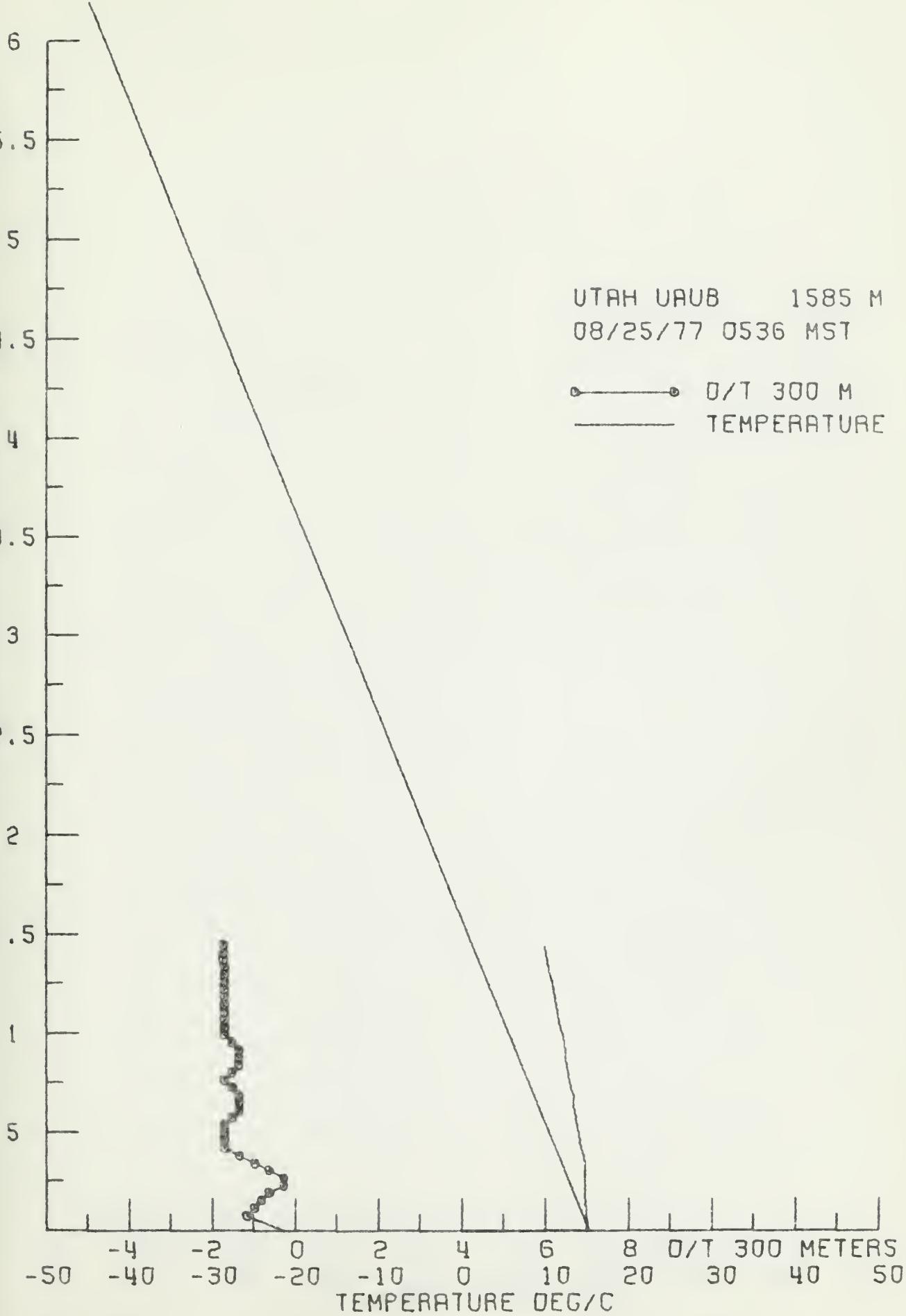


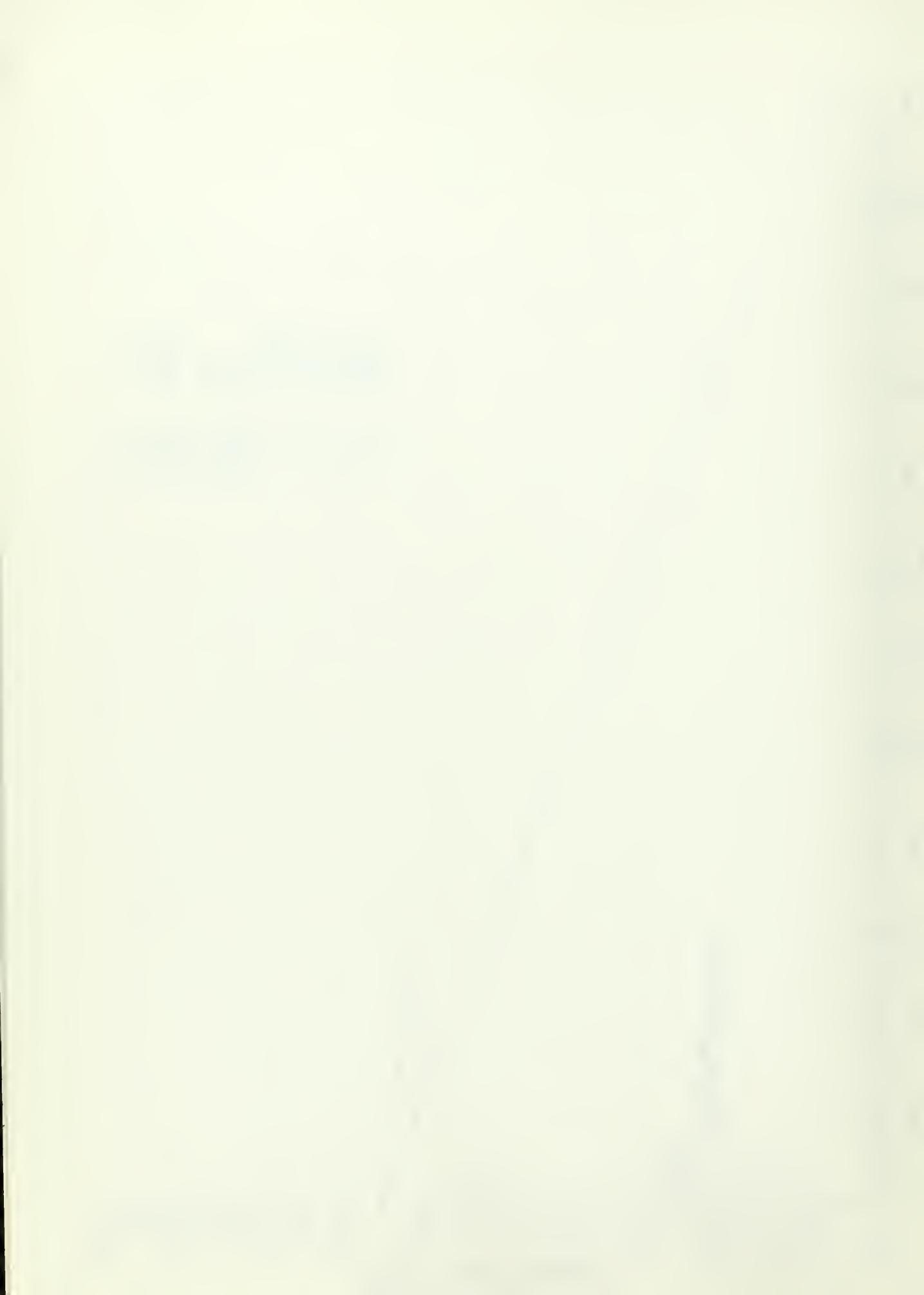


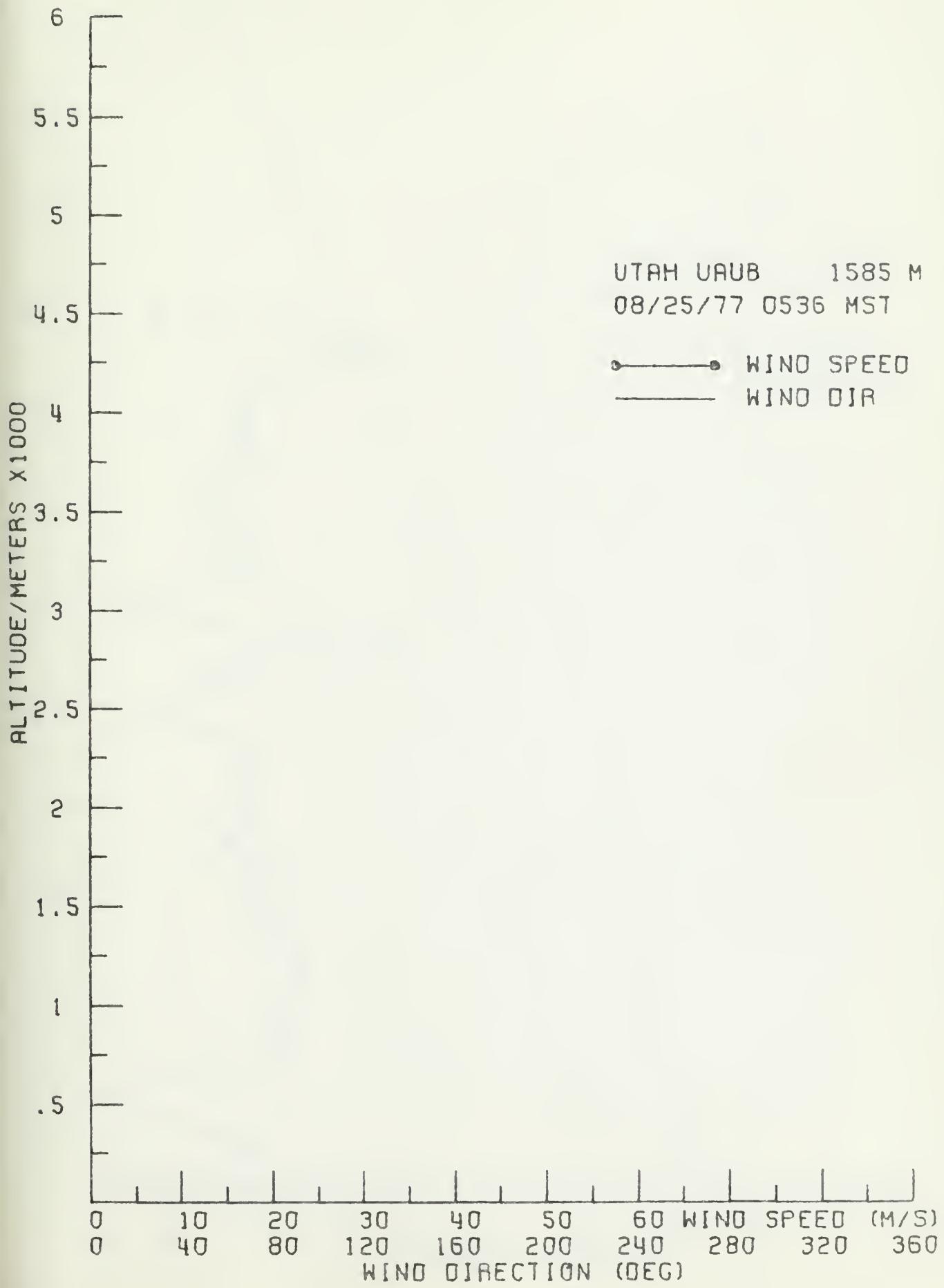


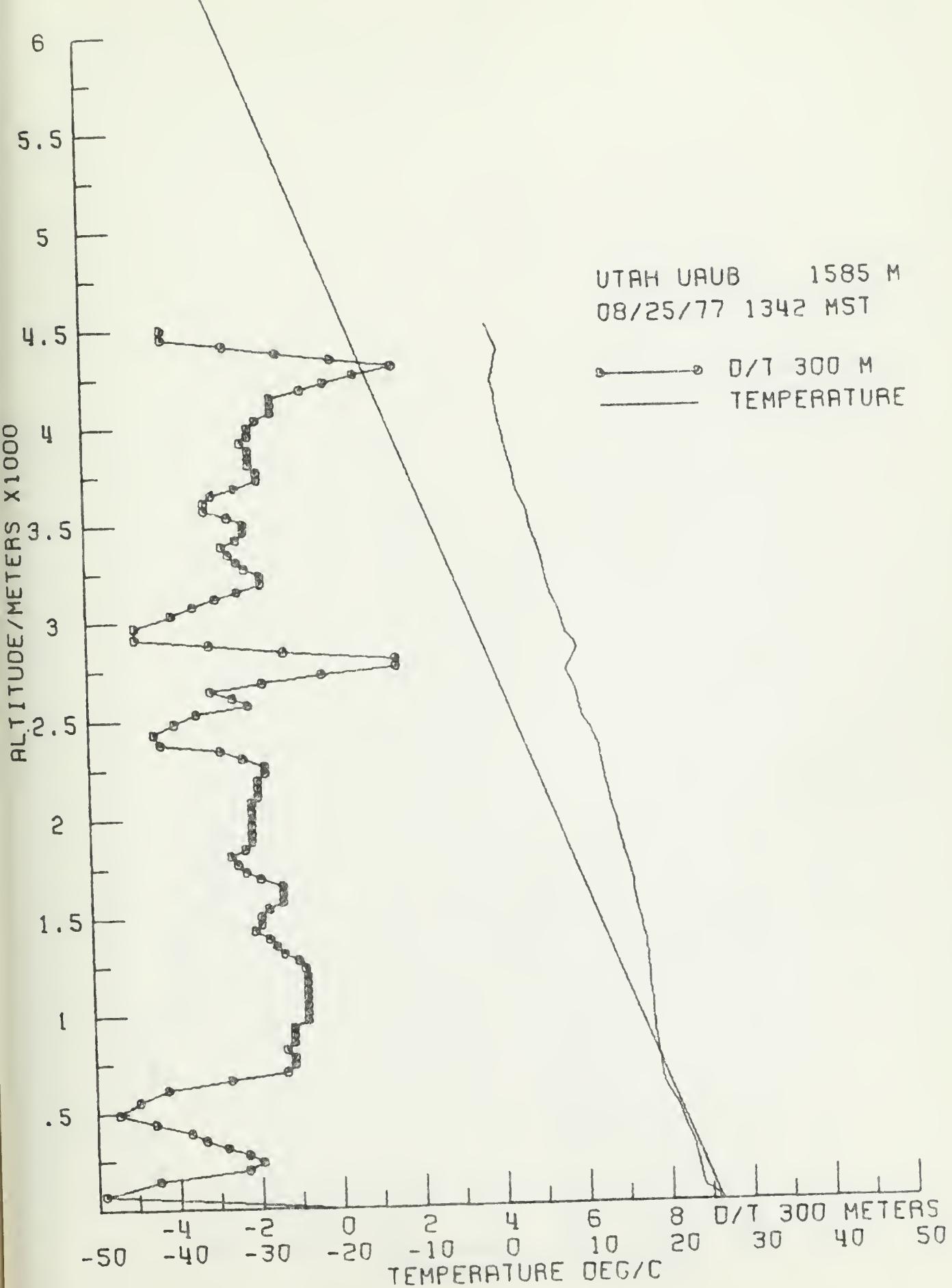


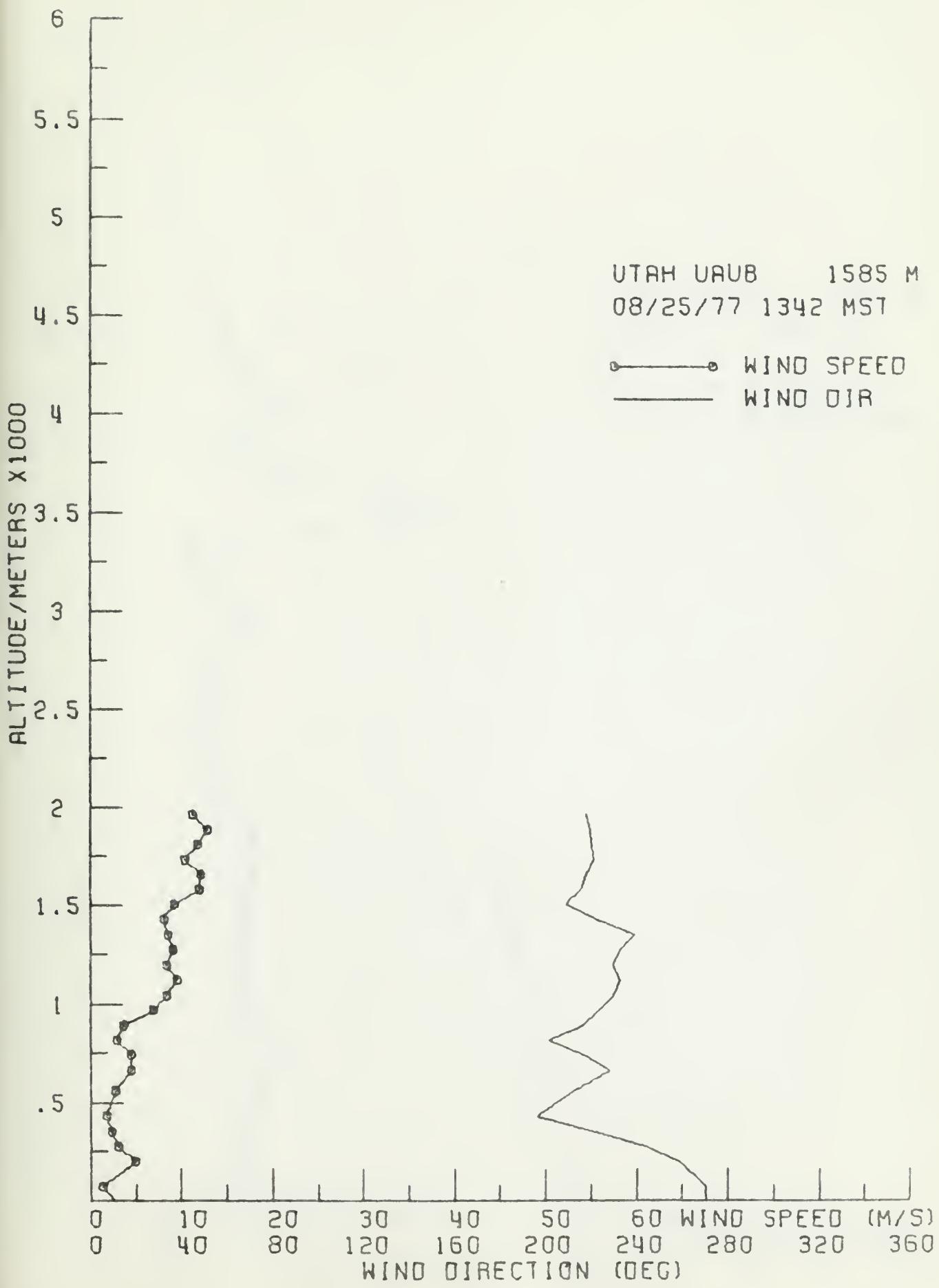
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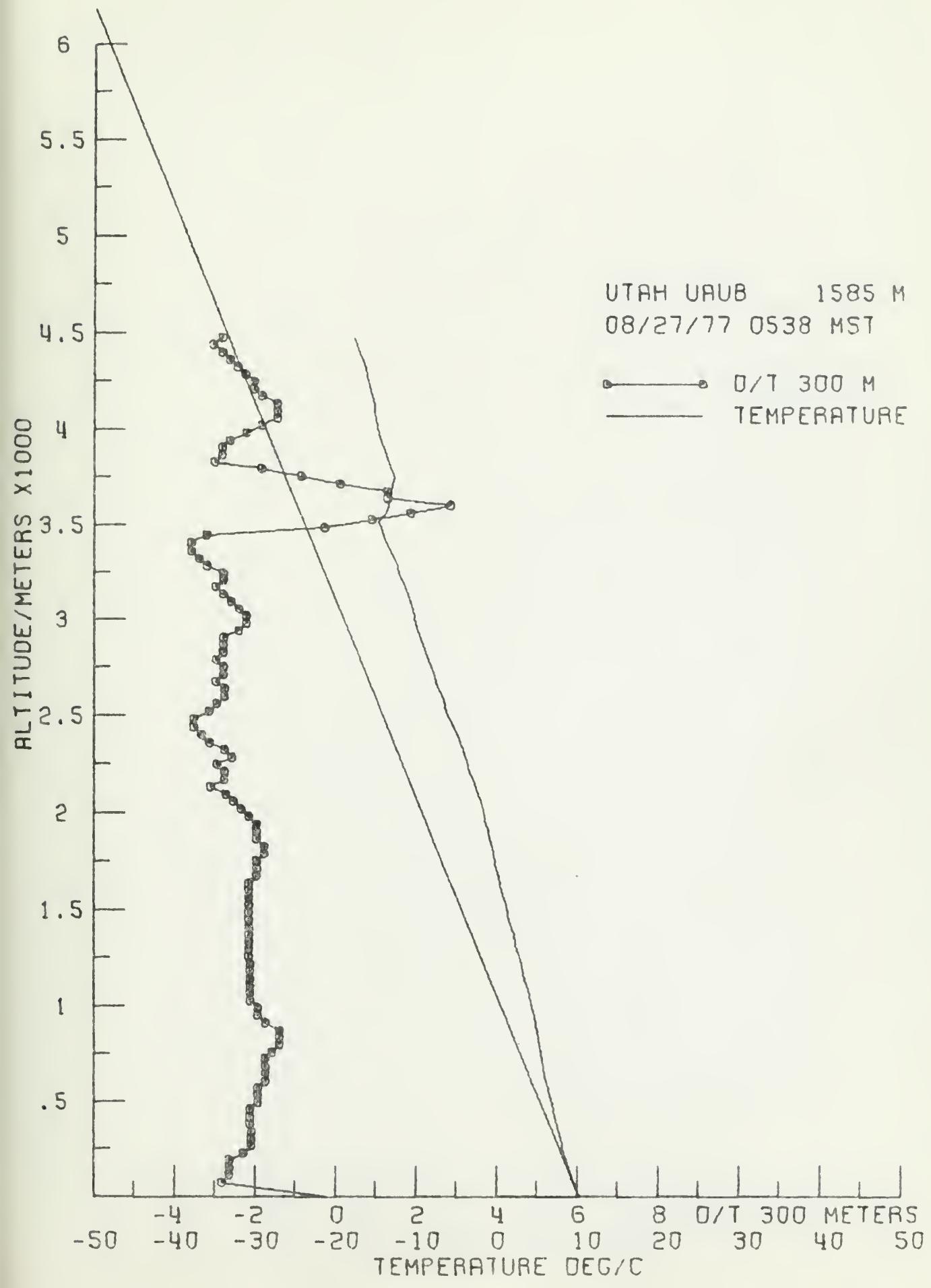


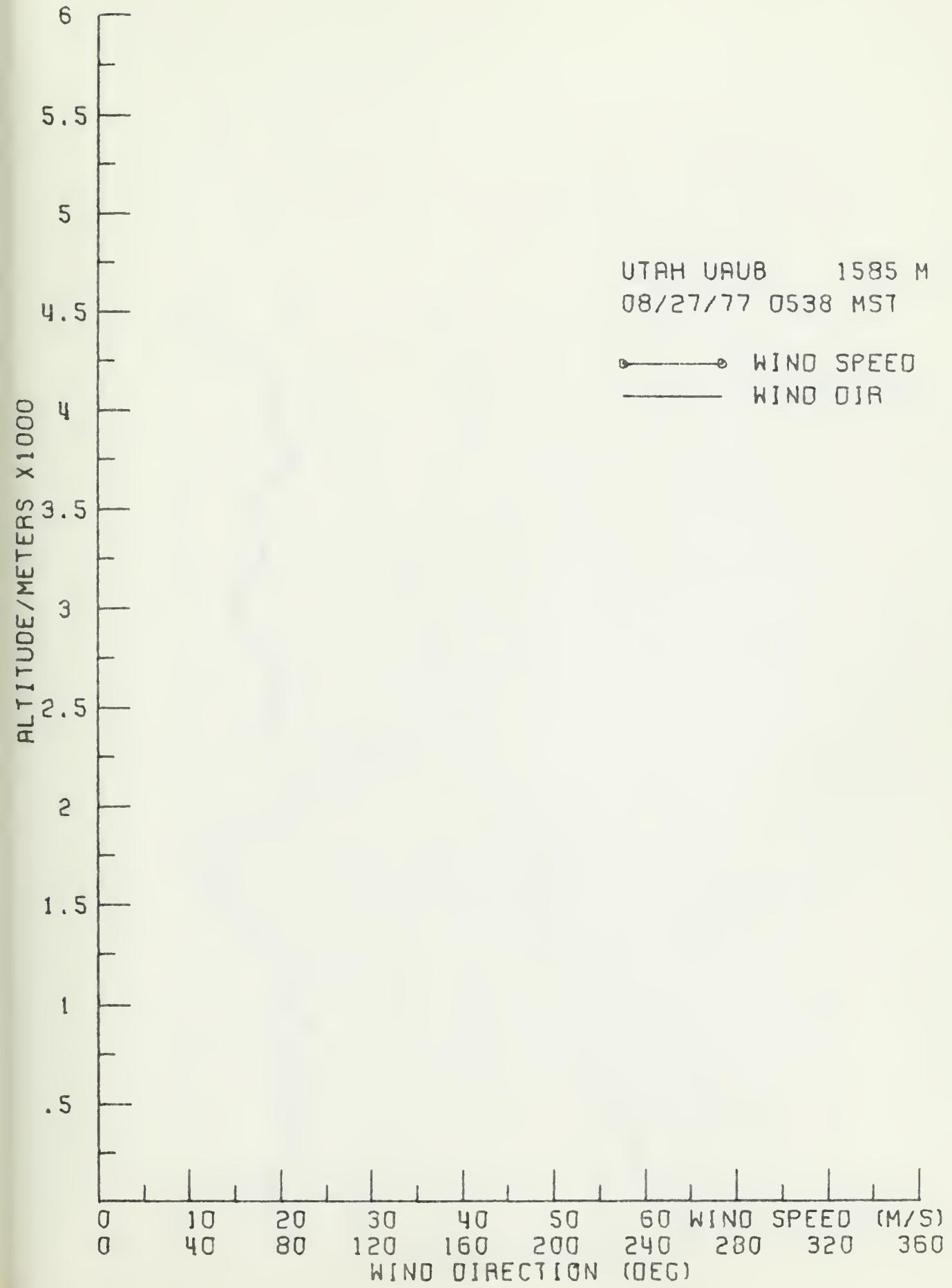




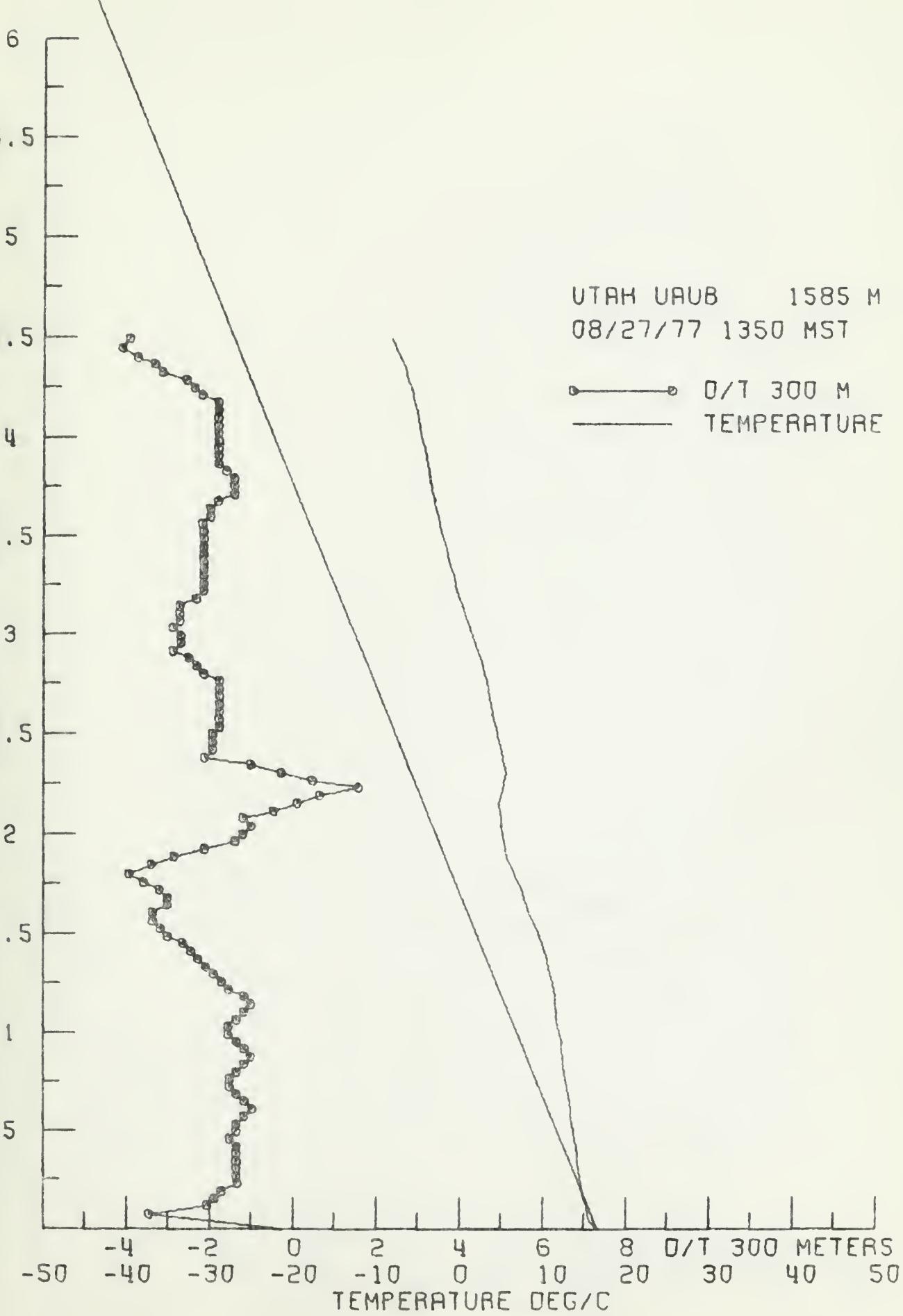


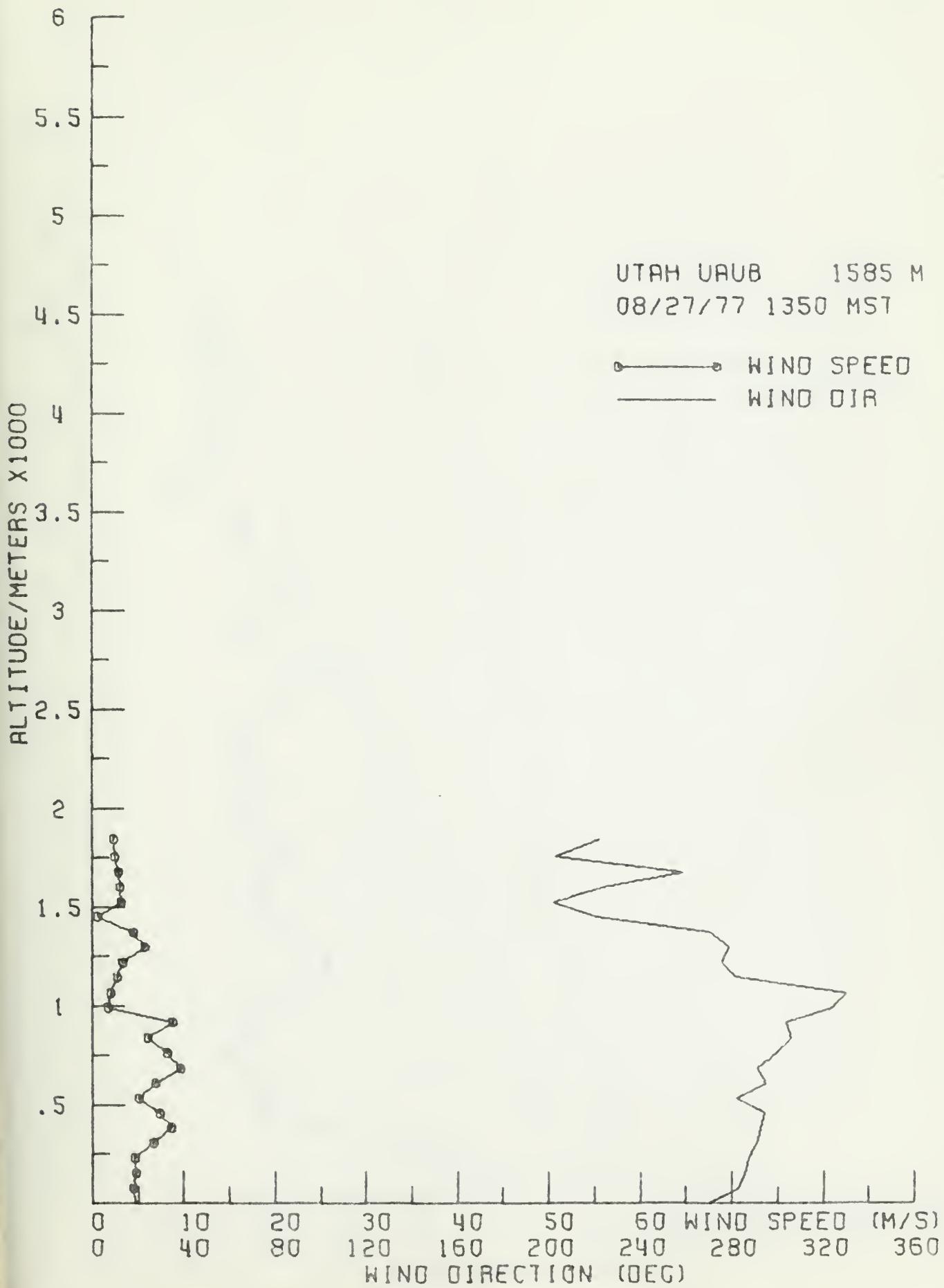


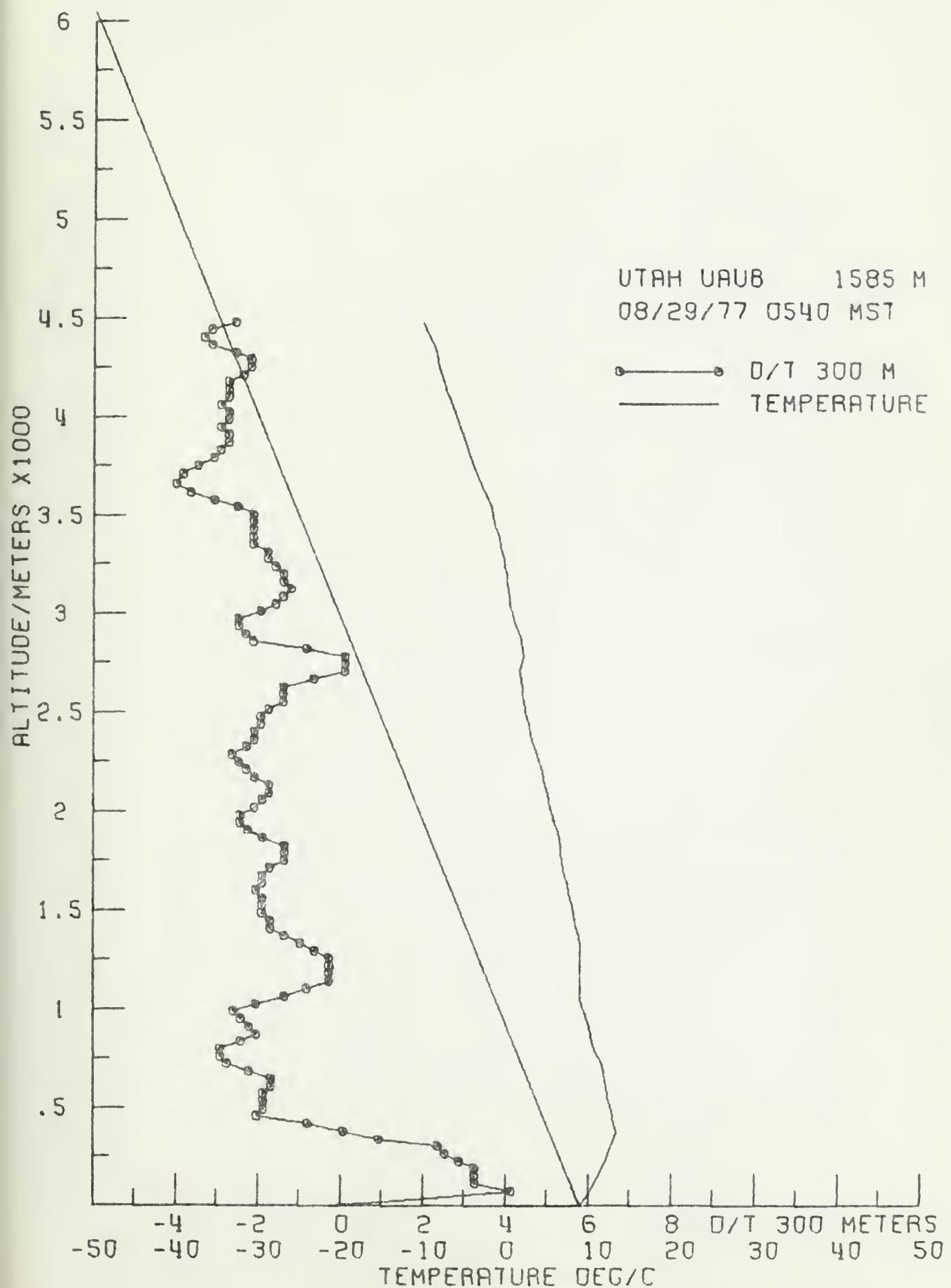


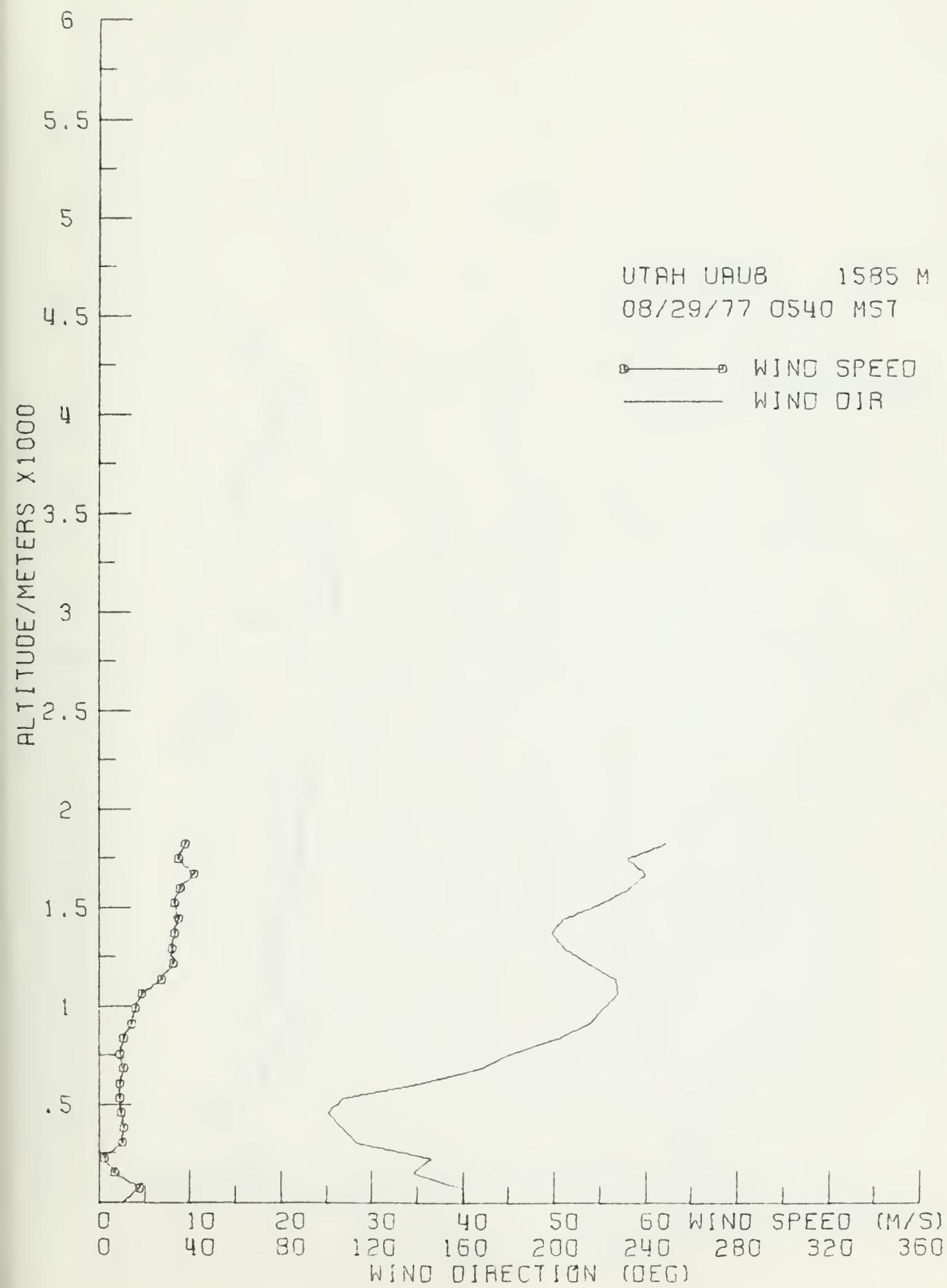


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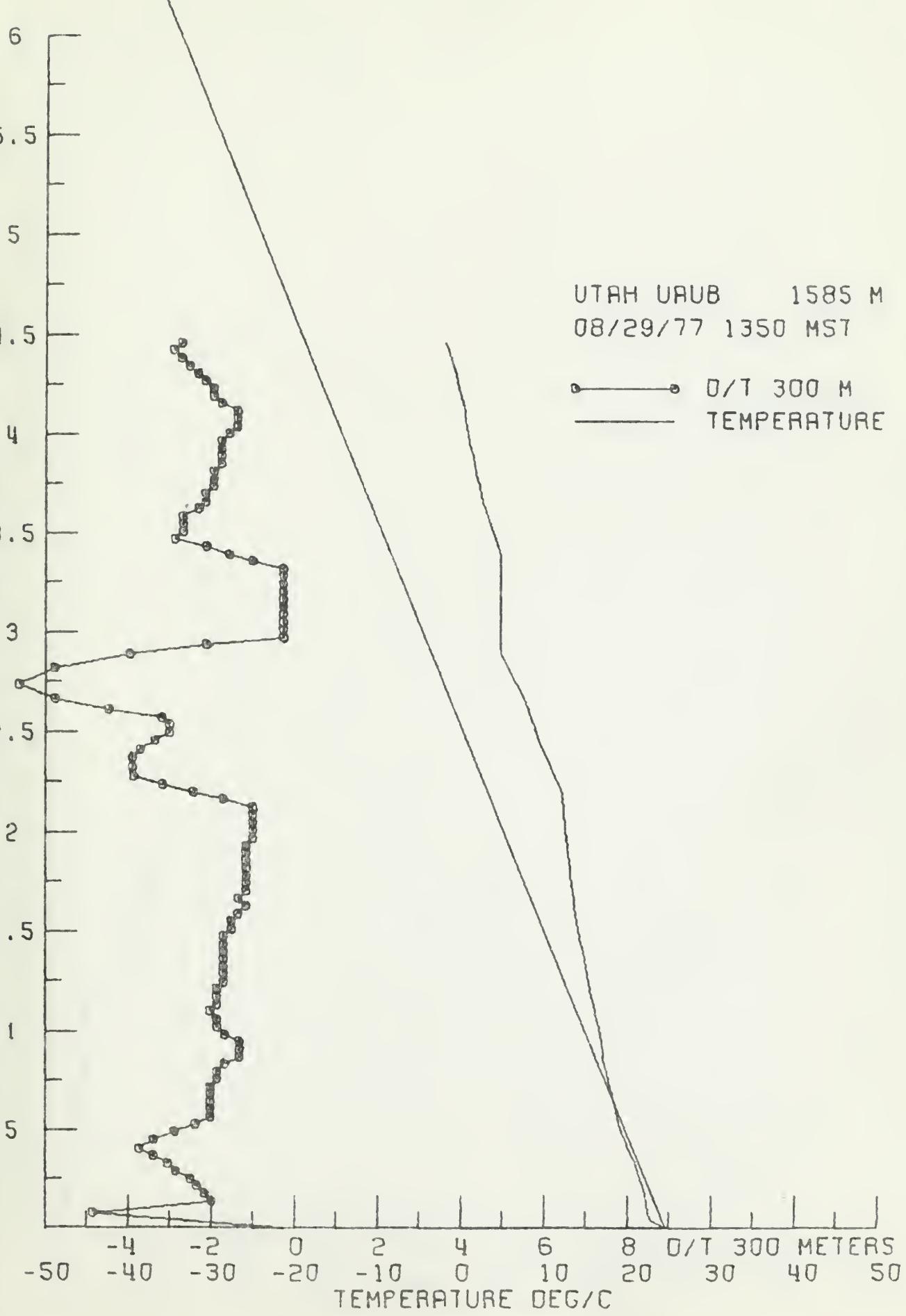


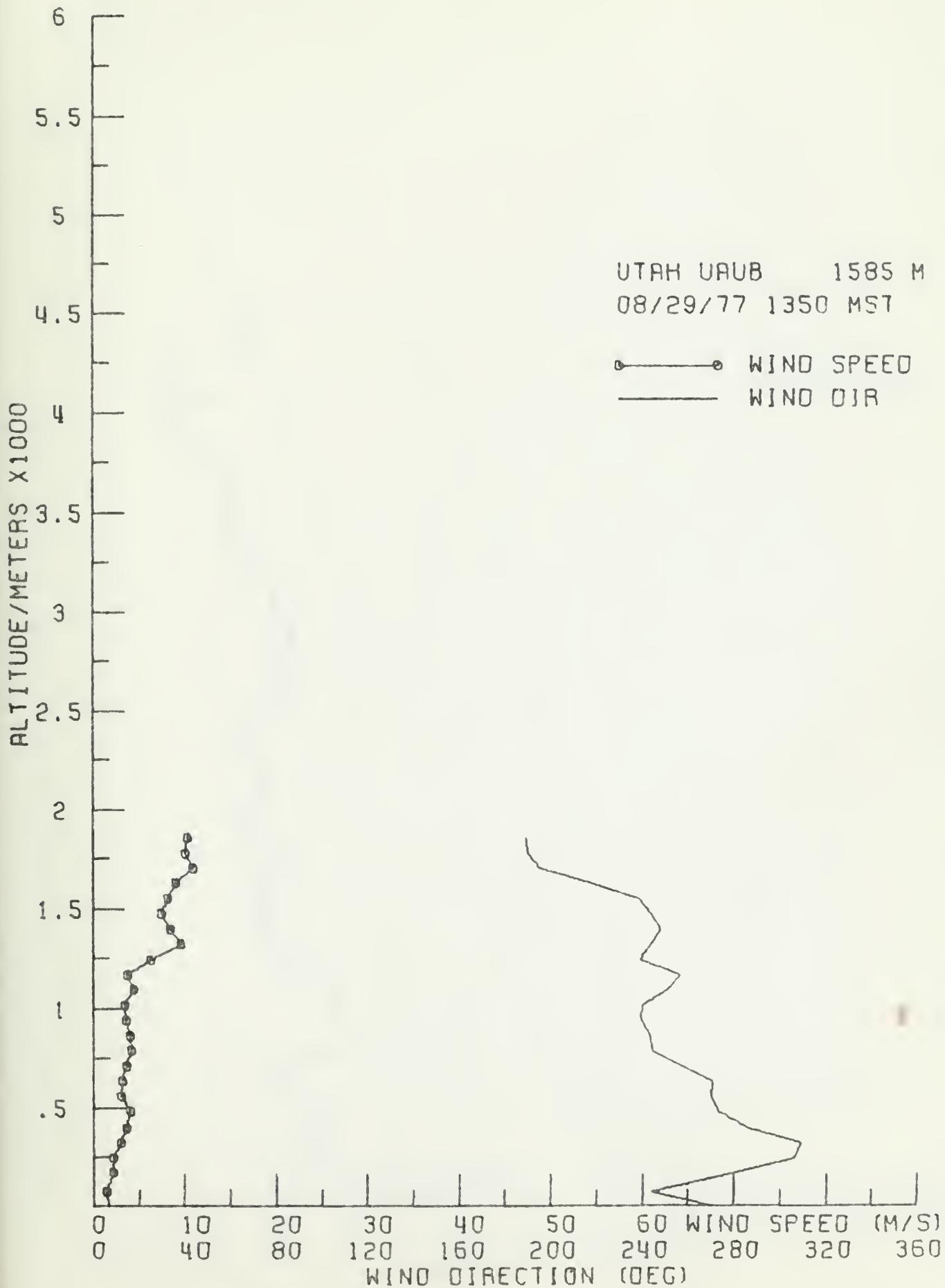




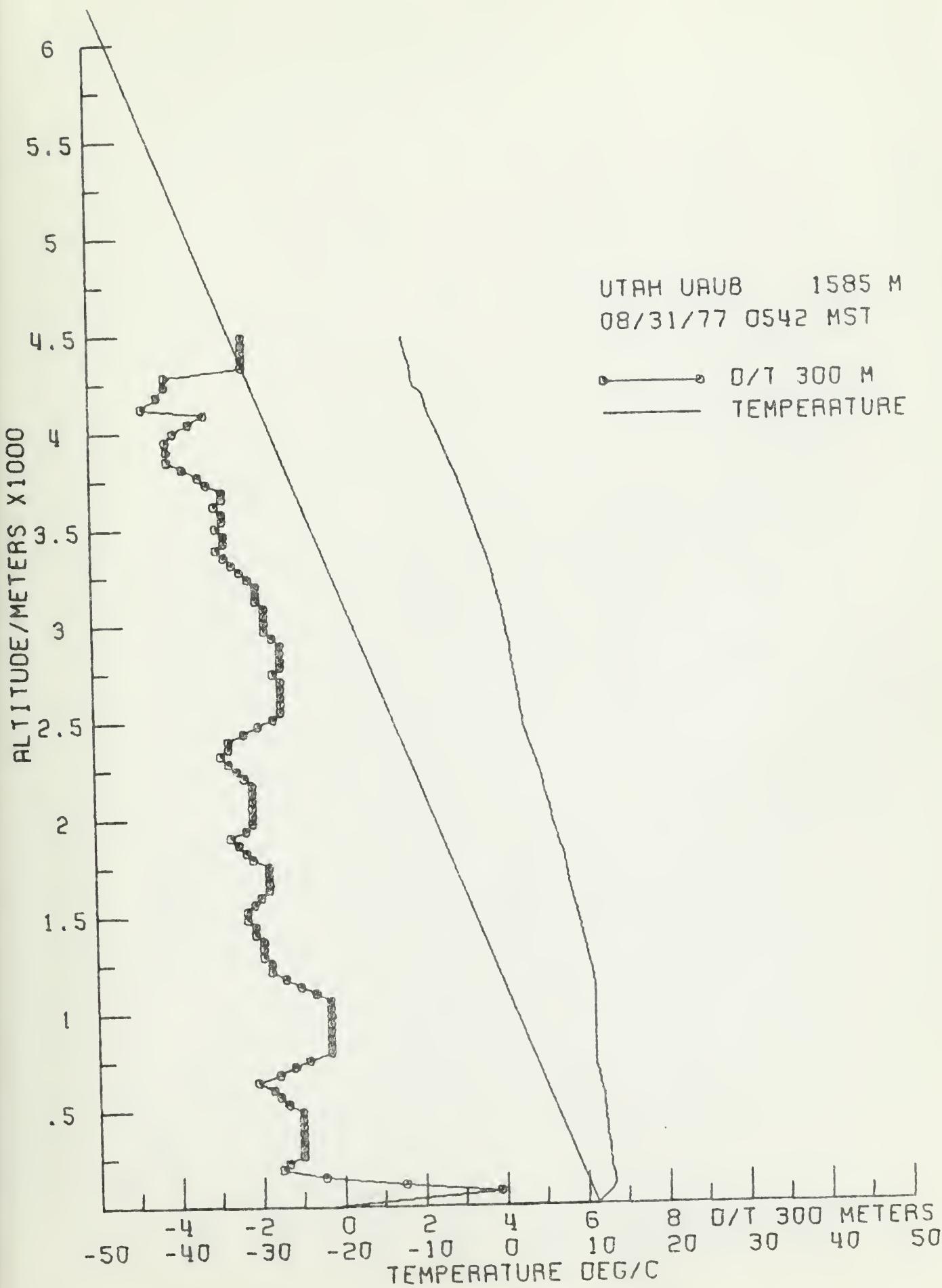


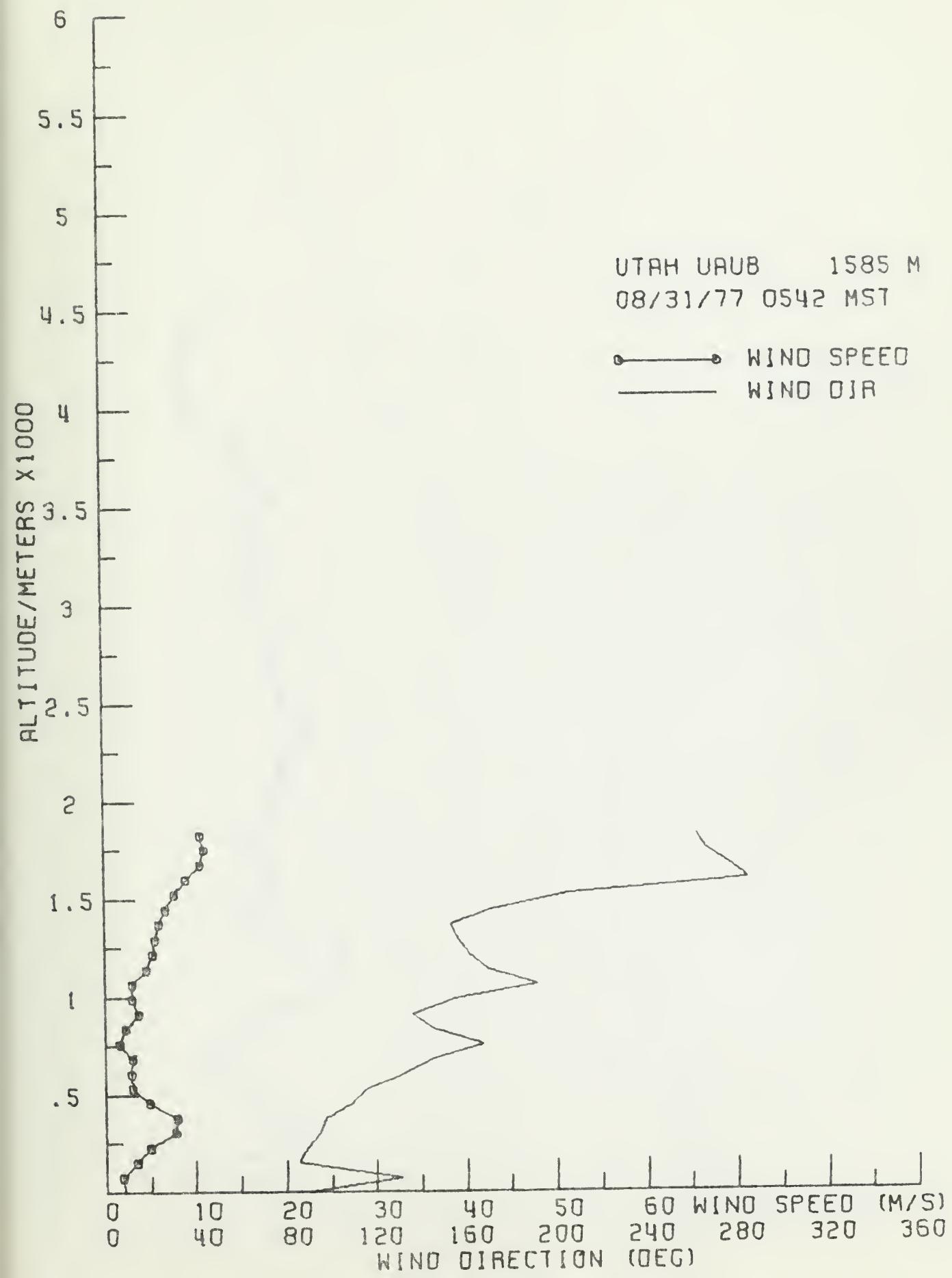
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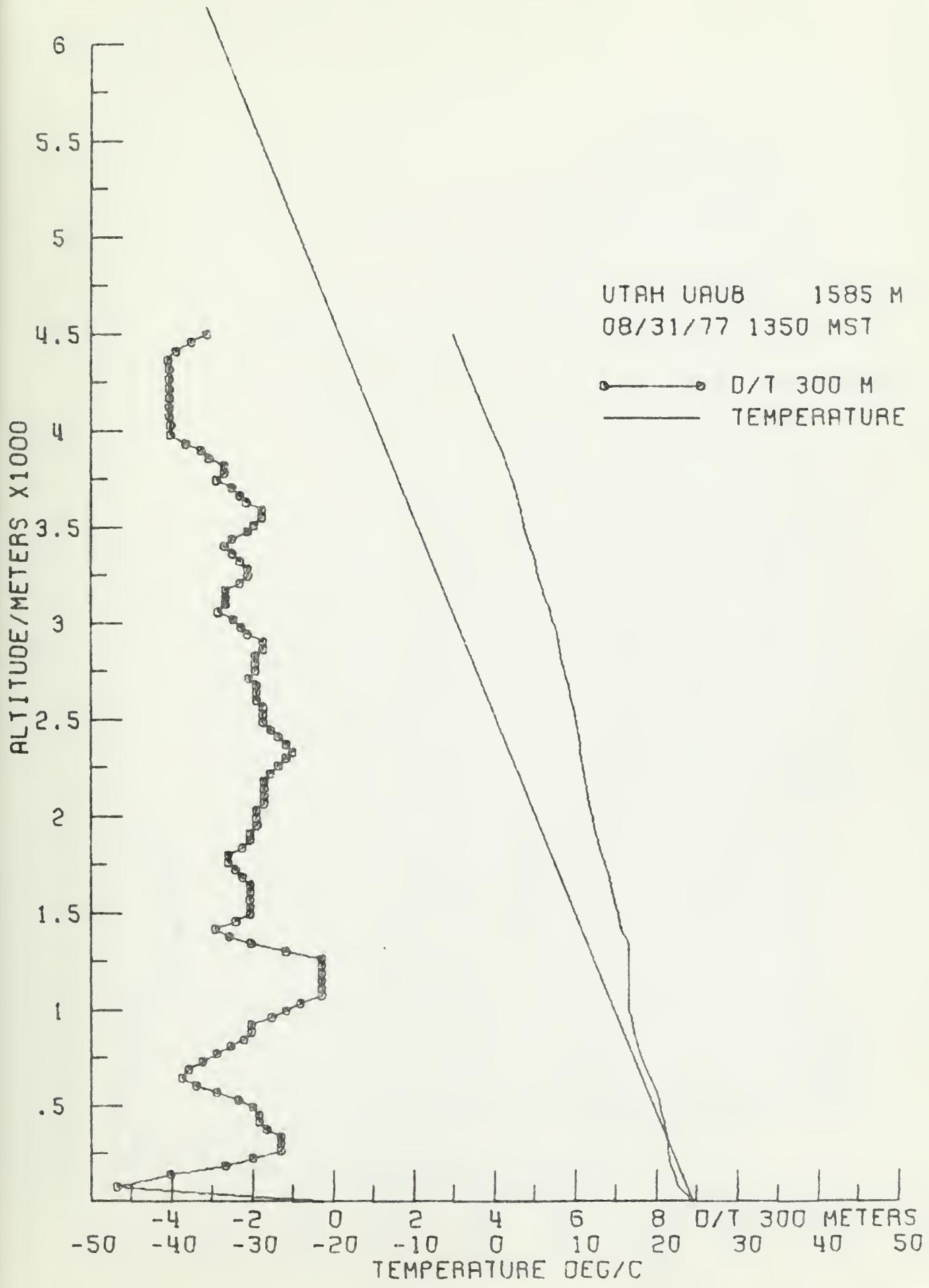


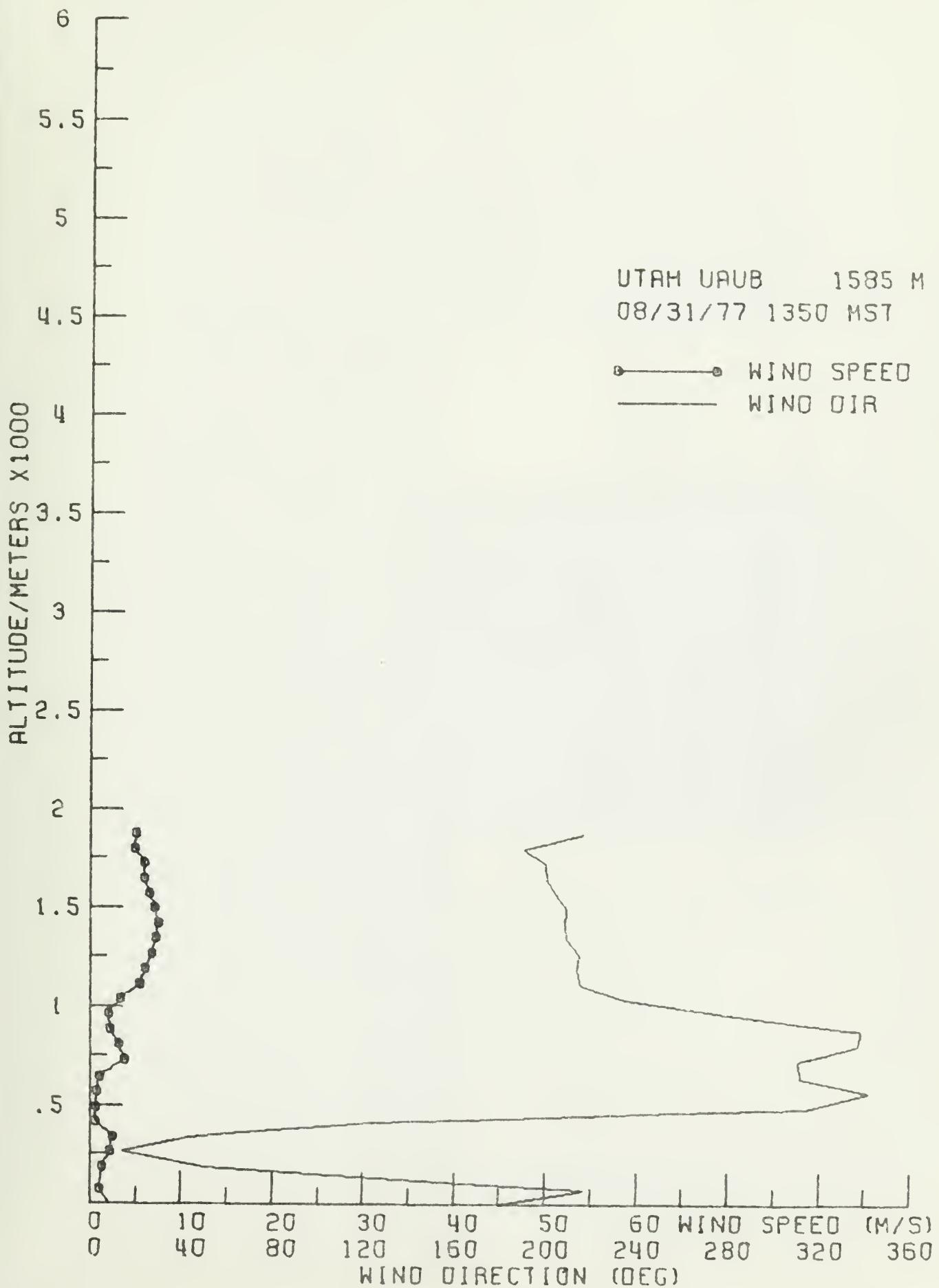












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